

UNCLASSIFIED

AD NUMBER
AD447557
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Aug 1964. Other requests shall be referred to Central Intelligence Agency, Office of Central Reference, 2430 E. Street, NW, Washington, DC 20505.
AUTHORITY
CIA ltr, 7 Sep 2004

THIS PAGE IS UNCLASSIFIED

447557

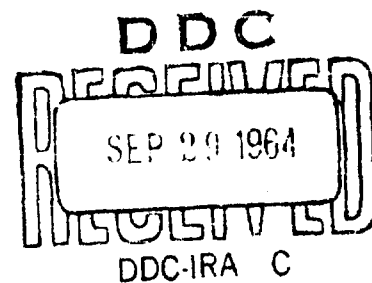
FOR OFFICIAL USE ONLY



CONSOLIDATED TRANSLATION SURVEY

Number 80

For August 1964



OFFICE OF CENTRAL REFERENCE
Foreign Documents Division
CENTRAL INTELLIGENCE AGENCY
2430 E St., N. W., Washington 25, D. C.

FOR OFFICIAL USE ONLY

BEST

AVAILABLE

COPY

CONSOLIDATED TRANSLATION SURVEY

FOR AUGUST 1964

TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Requests For Copies	iv
USSR	
Economic	1
Political	5
Military	5
Geographic	5
Sociological	5
Eastern Europe	
Economic	6
Political	9
Military	9
Geographic	10
Sociological	10
Western Europe	
Economic	10
Political	11
Military	11
Sociological	12
Africa	
Economic	12
Political	12
Sociological	12
Middle East	
Political	13
Far East	
Economic	13
Political	15
Military	16
Geographic	16
Sociological	16

	<u>Page</u>
Latin America	
Economic	18
Political	18
Sociological	18
World Wide	
Economic	18
Political	18
Sociological	18
Scientific	
Aerospace	18
Agriculture	18
Biological & Medical Sciences	20
Chemistry	29
Earth Sciences & Astronomy	32
Electronics	34
Engineering	35
Materials & Metallurgy	37
Mathematics & Data Processing	41
Nuclear Science & Technology	42
Physics	43
Miscellaneous	47
Information on Cover-To-Cover Translations	48
Index to Authors	131

CONSOLIDATED TRANSLATION SURVEY

PREFACE

This survey is prepared monthly by the Foreign Documents Division, Office of Central Reference, CIA, from lists received through the cooperation of US government agencies and includes translations prepared by such agencies, private industry, universities, research institutions, and commercial translation organizations. It is a compilation of foreign documentary projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (*), and, when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

REQUESTS FOR COPIES

Requests for copies of published projects should be made direct to the designated producing organization.

All requests for items prefixed by "CIA" should be addressed to Office of Central Reference, 2430 E Street, NW, Washington, D.C. 20505

Addresses of producers follow:

ACSI

Department of Army
Assistant Chief of Staff, Intelligence
Intelligence Documents Branch
Washington 25, D.C.

Requests from non-Government sources for
Army documents should be ordered through

Department of Commerce
Office of Technical Services
Washington 25, D.C.

AEC - Atomic Energy Commission (see Department of Commerce)

AERE Harwell Lib

The Librarian
AERE, Ministry of Supply
Harwell, Didcot, Birks
England

AF

Department of Air Force
Collection and Dissemination
Assistant Chief of Staff, Intelligence
ATTN: AFCIN 1B3
Washington 25, D.C.

AGU

American Geophysical Union
1515 Massachusetts Avenue, NW
Washington, D.C. 20005

AIP

American Institute of Physics
335 East 45th Street
New York 17, New York

Amer Math Soc

American Mathematical Society
190 Hope Street
Providence 6, Rhode Island

Amer Meteorol Soc

The American Meteorological Society
45 Beacon Street
Boston 8, Massachusetts

ANL - Argonne National Laboratory, Illinois
(see AEC)

APL - Applied Physics Laboratory (see Navy)

Army Map Service - (see ACSI)

AWRE - (see AEC)

BISI

British Iron and Steel Institute
4 Grosvenor Gardens
London, S.W. 1, England

CB

Consultants Bureau, Incorporated
227 West 17th Street
New York 11, New York

CTI

Columbia Technical Translations
5 Vermont Avenue
White Plains, New York 10600

DDC

Defense Documentation Center
TISIA-1
Arlington Hall Station
Arlington 12, Virginia

Dept of Com

Department of Commerce
Office of Technical Services
Washington 25, D.C.

Dept of Interior

Department of Interior
Department Library
Foreign Documentation Section
Washington, D.C. 20240

Dept of State

Department of State
Division of Library and Reference Service
132 State Annex 1
Washington, D.C.

Emmanuel Coll Res Lang Ctr

Emmanuel College Research Language Center
The Fenway
Boston, Massachusetts

Fisheries Res Bd of Canada

Fisheries Research Board of Canada
Biological Station
Nanaimo, British Columbia

FTD - Foreign Technology Division (see AF)

HIO - Hydrographics Office (see Navy)

ISA

Instrument Society of America
313 Sixth Avenue
Pittsburgh 22, Pennsylvania

JPRS

U.S. Department of Commerce
Office of Technical Services
Joint Publications Research Service
Building Tempo E,
East Adams Drive, 4th & 6th Streets, SW
Washington, D.C. 20443

Ministry of Agri

Ministry of Agriculture
Fisheries and Food
Fisheries Laboratory
Lowestoft, Suffolk, England

NASA

National Aeronautics and Space Administration
1512 H Street, NW
Washington, D.C. 20546

Navy

Department of Navy
Office of Naval Intelligence
Washington 25, D.C.

NIH

Circulation Unit
Readers Services Section
Library Branch, DRS
National Institutes of Health
Building 10, Room 5N118
Bethesda, Maryland 20014

NLL

National Lending Library
For Science & Technology
Boston Spa, Yorkshire, England

NHS - Navy Medical School (see Navy)

ONI - Office of Naval Intelligence (see Navy)

OSA

Optical Society of America, Incorporated
33 University Road
Cambridge, Massachusetts 02138

OTS

Office of Technical Service
Department of Commerce
Washington 25, D.C.

(Also available through Department of Commerce Field
Offices)

Scripta Technica, Inc

Scripta Technica Incorporated
1000 Vermont Avenue, NW
Washington 5, D.C.

UCRL - University of California Lawrence Radiation Laboratory;
Livermore, California
(see AEC)

UKAEA

United Kingdom Atomic Energy Authority
Development and Engineering Group
Risley, Warrington, Lancs, England

Univ of Illinois Press

University of Illinois Press
Urbana
Illinois

USDA

Department of Agriculture
Foreign Agricultural Service
Room 5086
14th and Independence Avenue, NW
Washington 25, D.C.

Van Nostrand

D. Van Nostrand Incorporated
120 Alexander Street
Princeton, New Jersey

Walker & Co

Walker & Company
10 West 56th Street
New York 19, New York

TRANSLATIONS REPORTED

FOR AUGUST 1964

USSR

Economic

Increasing Economic Effectiveness and Basic Proportions of Development of Social Production During New Five-Year Plan, by A. Notkin, 12 pp. RUSSIAN, rpt., JPRS 25373

Unified Deepwater Transportation System, by A. A. Mitayshvili, 28 pp. RUSSIAN, pamphlet, Edinaya Glubokovodnaya Zvanyie, Moscow, 1963, pp 1-31. JPRS 25511

Fundamentals of Organization of Material-Technical Supply and Material Balances, by P. V. Furduyev, P. P. Karpov, 23 pp. RUSSIAN, bk, Material'nyye Balansy v Narodnokhovayatsvennom Plane, Moscow, 1960, pp 5-28. JPRS 25304

Principles of the Planning of Retail Commodity Turnover, by K. M. Skovoroda, 101 pp. RUSSIAN, bk, Osnovy Planirovaniya Roznichnogo Tovaroborota, Moscow, 1963, pp 1-135. JPRS 25522

Cost of Production in Heavy Industry, by R. S. Livshits, 71 pp. RUSSIAN, bk, Sebestoimost' Produktii v Tyazheloy Promyshlennosti SSSR, Moscow, 1961, pp 216-291. JPRS 25678

The Cost of Production and Cost Accounting, by V. Bunimovich, 12 pp. RUSSIAN, bk, Sebestoimost' Promyshlennoy Produktii i Tekhnicheskii Progress, Moscow, Chapter I, 1962, pp 13-27. JPRS 25701

Machine Building, by V. Bunimovich, 9 pp. RUSSIAN, bk, Sebestoimost' Promyshlennoy Produktii i Tekhnicheskii Progress, Moscow, Chapter III, 1962, pp 71-84. JPRS 25701

Price and Value in a Socialist Economy, by D. D. Kondrashev, 177 pp. RUSSIAN, bk, Tsena i Stoimost' Sotsialisticheskoy Khozyaystva, Moscow, 1963, pp 3-245. JPRS 25346

Cost and Certain Questions of Price Formation in Industry, by N. Gal'perin, V. Zhukov, 18 pp. RUSSIAN, booklet, Voprosy Planirovaniya i Kal'kulirovaniya Sebestoimosti Promyshlennoy Produktii, Moscow, 1961, pp 41-57. JPRS 25504

Improvement of the Road Network in Rural Areas, by P. F. Burlay, A. Z. Makrovich, 5 pp. RUSSIAN, per, Avtomobil Dorogi, No 4, 1964, pp 4, 5. JPRS 25621

Devoting More Attention to Garage Equipment Production, by A. Gal'burt, 8 pp. RUSSIAN, per, Avtomobil Transport, No 2, 1964, pp 15-17. JPRS 25490

Specialization in the Automobile Enterprises of the Baltic Republics, by A. Oganyan, 6 pp. RUSSIAN, per, Avtomobil Transport, No 2, 1964, pp 22-23. JPRS 25490

USSR

Economic (Contd)

Improvement of Motor Fleet Utilization Should be the Primary Goal, by F. Kalabukhov, 9 pp. RUSSIAN, per, Avtomobil Transport, No 4, 1964, pp 1-4. JPRS 25621

The Utilization of the Motor Vehicle Park in Construction Must be Improved, 6 pp. RUSSIAN, per, Avtomobil Transport, No 4, 1964, pp 6, 7. JPRS 25621

Use of Synthetic Materials in Automotive Repair Encouraged, by G. Malyshev, 5 pp. RUSSIAN, per, Avtomobil Transport, No 4, 1964, pp 25, 26. JPRS 25351

Belorussian Motor Vehicle Plant Produces New Series of Heavy Trucks, by Z. Sirotkin, 5 pp. RUSSIAN, per, Avtomobil Transport, No 4, 1964, pp 41, 42. JPRS 25351

Tour of Installations in the Transcaucasian Republics, by V. Dimitrov, 7 pp. RUSSIAN, np, Bakinskiy Rabochiy, 20, 21, 23, 27, 28 May, 2, 4 Jun 1964; Zarya Vostoka, 20, 21, 23, 27, 28, 30 May 1964. JPRS 25749

Increasing the Quality, Reliability, and Period of Service of Articles Produced by Enterprises of the Central'no-Chernozemnyy Sovnarkhoz, by L. B. Presnyakov, 5 pp. RUSSIAN, per, Byul Tekh Ekon Informat, No 3, 1964, pp 83, 84. JPRS 25363

Reviews of the Level of Engineering and Technology in the Enterprises of the Leningradskiy Sovnarkhoz, by V. A. Ivanov, 6 pp. RUSSIAN, per, Byul Tekh Ekon Informat, No 3, 1964, pp 86-88. JPRS 25363

New Technology in the Production of Chemical Fibers Discussed, by R. H. Martinkovskaya, 6 pp. RUSSIAN, per, Byul Tekh Informat, No 4, 1964, pp 17-21. JPRS 25341

Economic Criteria of Distribution by New Production, by Yu. Ragalyavichyus, 5 pp. RUSSIAN, np, Ekon Gazeta, No 12, 21 Mar 1964, p 5. JPRS 25569

Efficiency Vs. Mismanagement, by N. Kozlov, 12 pp. RUSSIAN, np, Ekon Gazeta, No 13 (138), 28 Mar 1964, pp 9, 10. JPRS 25470

Progressive Methods for All Enterprises All-Union Review of the Organization of Production in Machine-Building Factories, by V. Lagutkin, 7 pp. RUSSIAN, np, Ekon Gazeta, No 17, Apr 1964, p 4. JPRS 25363

Urgent Trade Problems, 5 pp. RUSSIAN, per, Ekon Gazeta, No 19, 9 May 1964, p 2. JPRS 25570

The Designer and the Quality of Machines, by N. Kabatov, 6 pp. RUSSIAN, np, Ekon Gazeta, No 21, 23 May 1964, p 9. JPRS 25755

USSR
Economic (Contd)

Efficiency of Capital Investments in Ferrous Metallurgical Industry Should be Increased, by V. Zimin, 6 pp.
RUSSIAN, np, Ekonomika, No 21, 23 May 1964, pp 12, 13.
JPRS 25606

Increased Need for Synthetic Fibers in Soviet Textile Industry, 12 pp.
RUSSIAN, np, Ekonomika, No 21 (146), 23 May 1961, pp 19, 20.
JPRS 25570

Bureaucratic Activity, by V. Yakhno, 5 pp.
RUSSIAN, np, Ekonomika, No 21, 23 May 1964, p 31.
JPRS 25755

Continuous Operative-Productive Planning Method, by A. Gryaznov, 43 pp.
RUSSIAN, np, Ekonomika, No 23, 6 Jun 1964, pp 21-28.
JPRS 25465

New By-Laws for the Railroads, 5 pp.
RUSSIAN, np, Ekonomika, No 23, 6 Jun 1964, p 37.
JPRS 25556

Shortcomings in Designing Work Condemned, by K. Aver'yanov, 5 pp.
RUSSIAN, np, Ekonomika, No 24, 13 Jun 1964, pp 8, 9.
JPRS 25722

The First Domestic DRI Diesel Train, by P. I. Kurdyumov, 6 pp.
RUSSIAN, per, Elektrich i Teplovoz Tyaga, No 4, 1964, pp 12-14.
JPRS 25556

The Board of the Ministry of Finances USSR Outlines New Tasks, 9 pp.
RUSSIAN, per, Finansy SSSR, No 3, 1964, pp 89-92.
JPRS 25458

Water Resources and Their Use in the Armenian SSR, By A. M. Ter-Agonesian, 11 pp.
RUSSIAN, per, Gidrotekh Stroitel, 1964, pp 3-5.
(Call No TCl G44 1964, No 3, Eng Tr)
Army Map Service

A Large Hydraulic Model of the Mississippi River Basin, by F. Skladnev, P. V. Samostrellov, 7 pp.
RUSSIAN, per, Gidrotekh Stroitel, 1964, pp 47-49.
(Call No TCl G44 1964, No 3, Eng Tr)
Army Map Service

The Union of Agriculture, Chemistry, and Aviation, by Ye. F. Loginov, 10 pp.
RUSSIAN, per, Grazhdan Aviat, No 3, 1964, pp 1-3, 9.
JPRS 25621

Industrializing Terminal Locomotive Repair Operations, 15 pp.
RUSSIAN, np, Gudok, 14 May 1964, pp 1, 3.
JPRS 25621

New Train Movement Chart, by I. Zubov, 7 pp.
RUSSIAN, np, Gudok, 30 May 1964, pp 1, 3.
JPRS 25556

Two-Year Plan of Development of a Single Transport Network, by L. Chertkov, 10 pp.
RUSSIAN, np, Gudok, 2 Jun 1964, p 3; 3 Jun 1964, p 2.
JPRS 25556

New By-Laws for the Railroads, by N. Gundobin, 11 pp.
RUSSIAN, np, Gudok, 3 Jun 1964, pp 1, 3.
JPRS 25556

USSR
Economic (Contd)

Necessary to Create Agencies Responsible for Repair Work, by P. Bunich, 5 pp.
RUSSIAN, np, Izvestiya, 21 Mar 1964, p 3.
JPRS 25458

A Press Within Limits, by Z. Kopellovich, 5 pp.
RUSSIAN, np, Izvestiya, 9 May 1964, p 3.
JPRS 25363

Azimuth to Profit Problems of Foundry Production and Ways of Solving Them, by L. Sokolovskiy, 5 pp.
RUSSIAN, np, Izvestiya, 19 May 1964, p 5.
JPRS 25682

Certain Problems of Specialization and Cooperation in the Industry of the Transcaucasus, by E. Alikhanov, 8 pp.
RUSSIAN, np, Izvestiya, 27 May 1964, p 3.
JPRS 25595

Give Incentive to Innovation, Give Enterprises an Interest in Developing the Production of Consumer Goods, by N. Masterov, 5 pp.
RUSSIAN, np, Izvestiya, 29 May 1964, p 3.
JPRS 25570

The Food Industry and Chemistry, by P. Naumenko, 10 pp.
RUSSIAN, per, Kommunist, No 9, Jun 1964, pp 27-34.
JPRS 25654

The Machine System for the Chemicalization of Agriculture, by V. Kosov, 9 pp.
RUSSIAN, per, Kommunist, No 9, Jun 1964, pp 35-41.
JPRS 25654

Overall Mechanization and Automation in Ferrous Metallurgy, by K. P. Kostenetskiy, 10 pp.
RUSSIAN, per, Mekhan i Avtomat Proiz, No 5, 1964, pp 8-12.
JPRS 25756

Reliability and Longevity Are the Principal Indicators of Quality in Construction Machinery, 10 pp.
RUSSIAN, per, Mekh Stroitel, No 6, 1964, pp 1-3.
JPRS 25748

West Siberian Metallurgical Plant New Metallurgical Giant in East of Country, by L. S. Klimasenko, 7 pp.
RUSSIAN, per, Metallurg, No 4, 1964, pp 3-5.
JPRS 25324

Metallurgical and Ore Mining Industry of Ukrainian Soviet Socialist Republic in 1964 Sixth Year of Seven-Year Plan, by Ya. P. Kulikov, 6 pp.
RUSSIAN, per, Metallurg i Gornorud Prom, No 1, 1964, pp 3-5.
JPRS 25606

Intensification of Blast Furnace Production of the Ukrainian SSR, by G. Ya. Rutkovskiy, 6 pp.
RUSSIAN, per, Metallurg i Gornorud Prom, No 1, 1964, pp 10-12.
JPRS 25606

Intensification of Process of Blast Furnace Smelting With Combined Blast, by M. D. Zhembus, K. I. Kotov, 7 pp.
RUSSIAN, per, Metallurg i Gornorud Prom, No 1, 1964, pp 13-15.
JPRS 25606

Increase of Quality of Sinter an Important Reserve to Increase Smelting of Cast Iron, by A. P. Likhoradov, I. I. Entin, et al, 6 pp.
RUSSIAN, per, Metallurg Gornorud Prom, No 1, 1964, pp 15-18.
JPRS 25606

USSR
Economic (Contd)

Basic Problems of Increasing Smelting of Steel at Metallurgical Plants of the Ukrainian SSR, by V. G. Mal'kov, 6 pp.
RUSSIAN, per, Metallurg i Gornorud Prom., No 1, 1964, pp 20-23.
JPRS 25606

Application of Intensifiers in Steel Smelting Production of the Ukrainian Soviet Socialist Republic, by N. A. Tereshchenko, 5 pp.
RUSSIAN, per, Metallurg i Gornorud Prom., No 1, 1964, pp 23-25.
JPRS 25606

Economics of Oxygen-Converter Method of Steel Production, by N. A. Tareyko, 7 pp.
RUSSIAN, per, Metallurg i Gornorud Prom., No 1, 1964, pp 27-30.
JPRS 25606

Production of Economic Sections of Rolled Stock in Plants of the Ukrainian SSR National Economic Significance of Production of Economic Sections of Rolled Stock, by V. I. Volobuyev, 5 pp.
RUSSIAN, per, Metallurg i Gornorud Prom., No 1, 1964, pp 36-38.
JPRS 25606

Experience in Operation of Blast Furnace Shop at the Zaporozhstal Plant, by V. F. Bragin, S. T. Tarasov, 5 pp.
RUSSIAN, per, Metallurg i Gornorud Prom., No 1, 1964, pp 62-64.
JPRS 25606

Metallurgical Plant Imeni Petrovskiy, by N. I. Beda, L. A. Bogomolov, 5 pp.
RUSSIAN, per, Metallurg i Gornorud Prom., No 1, 1964, pp 67-69.
JPRS 25606

Let us Supplement the Country's Food Balance With Valuable Protein Products, 5 pp.
RUSSIAN, per, Molochnaya Prom., No 5, 1964, pp 1-3.
JPRS 25570

Every Cubic Meter of Gas to be Put to Use, by S. Khusainova, 10 pp.
RUSSIAN, per, Narod Khoz Kazak, No 3, 1964, pp 4-9.
JPRS 25659

Again Under the Threat of Stoppage, by Zh. Dosmukhamedov, 6 pp.
RUSSIAN, per, Narod Khoz Kazak, No 3, 1964, pp 9-12.
JPRS 25655

At the Don Chromite Pits, by P. Mikhaylov, 7 pp.
RUSSIAN, per, Narod Khoz Kazakh, No 3, 1964, pp 64-66.
JPRS 25662

Transport in Kazakhstan and Prospects for Its Development, by I. Polishchuk, 12 pp.
RUSSIAN, per, Narod Khoz Kazakh, No 4, 1964, pp 14-19.
JPRS 25556

Economic Development of Kirghiz SSR During 1966-1970 Five Year Plan, by K. Otorbayev, 9 pp.
RUSSIAN, per, Narod Khoz Sredney Azii, No 4, 1964, pp 37-41.
JPRS 25646

A New Route to the Caspian: The Karakum Canal, by P. Fedoryakov, 10 pp.
RUSSIAN, per, Narodnoye Khoz Sredney Azii, No 4, 1964, pp 44-48.
JPRS 25556

Construction of Ferrovanadium Shop at Chusovo Metallurgical Plant, by S. Vologdin, 7 pp.
RUSSIAN, per, Nauchno-Tekhn Obshch SSSR, No 5, 1964, pp 41-43.
JPRS 25628

USSR
Economic (Contd)

Problems of Structural Shifts and of Increases in the Effectiveness of Public Production, by A. Yefimov, 15 pp.
RUSSIAN, per, Plan Khoz, No 5, 1964, pp 13-23.
JPRS 25791

A New Material Incentive System, by O. Kozlov, 11 pp.
RUSSIAN, per, Plan Khoz, No 6, 1964, pp 49-55.
JPRS 25616

Use Computer Technology to Control the National Economy, by V. Glushkov, 5 pp.
RUSSIAN, np, Pravda, 12 Jul 1964, p 4.
JPRS 25649

Comments Concerning Hardening Heat Treatment of Rolled Products, by S. Akhmatov, 8 pp.
RUSSIAN, np, Pravda Ukrainy, 29 May 1964.
JPRS 25756

Progress of Chemical Industry in Central Asian Economic Region, 5 pp.
RUSSIAN, np, Pravda Vostoka, 13 May 1964, p 3.
JPRS 25722

Better Use of Production Reserves in River Fleet Necessary, by S. Kuchkin, 6 pp.
RUSSIAN, per, Rechnoy Transport, No 4, 1964, pp 1-3.
JPRS 25556

Rationalization of Flows of Bulk Cargoes Needed on Inland Waterways, by K. Krutikov, 10 pp.
RUSSIAN, per, Rechnoy Transport, No 4, 1964, pp 5-7.
JPRS 25556

Thorough Development of Petroleum Shipment Required, by V. Kurdin, 11 pp.
RUSSIAN, per, Rechnoy Transport, No 4, 1964, pp 7-10.
JPRS 25556

The Unified Deep-Water System of Inland Waterways in the European Part of the USSR, by P. Cherevko, 8 pp.
RUSSIAN, per, Rechnoy Transport, No 4, 1964, pp 28-30.
JPRS 25556

The Yield of Fish Must be Increased, 9 pp.
RUSSIAN, per, Rybnoye Khoz, No 1, 1964, pp 3-5.
JPRS 25605

Ways for Further Development of Pond Pisciculture in USSR, 11 pp.
RUSSIAN, per, Rybnoye Khoz, No 1, 1964, pp 6-9.
JPRS 25605

Fiftieth Anniversary of Pisciculture Education in USSR, 7 pp.
RUSSIAN, per, Rybnoye Khoz, No 1, 1964, pp 18-20.
JPRS 25605

Pattern of the Sturgeon Catch in the Caspian Sea, by N. I. Kozhin, 7 pp.
RUSSIAN, per, Rybnoye Khoz, No 1, 1964, pp 23-25.
JPRS 25605

Sazan Catches in the Lower Reaches and Delta of the Volga During 1953-1961, by P. D. Nelovkin, 11 pp.
RUSSIAN, per, Rybnoye Khoz, No 1, 1964, pp 31-36.
JPRS 25605

Development of Large-Scale Chemistry and Technical Progress in the Fishing Industry, by V. P. Zaytsev, 11 pp.
RUSSIAN, per, Rybnoye Khoz, No 5, 1964, pp 3-7.
JPRS 25672

Initial Results of the Transition to New Conditions in the Fishing Industry, by Ye. N. Kazancheyev, 6 pp.
RUSSIAN, per, Rybnoye Khoz, No 5, 1964, pp 8-11.
JPRS 25672

USSR
Economic (Contd)

New Equipment for Chemical Protection of Crops, by I. Sterkin, 6 pp.
RUSSIAN, per, Sel'skiy Mekhanizator, No 1, 1964, pp 5-7.
JPRS 25723

The Tie Between the Clothing Industry and Trade Organizations, by P. I. Bakhrin, Lvov, 6 pp.
RUSSIAN, per, Shveytnaya Prom, No 2, Mar, Apr 1964, pp 19-22.
JPRS 25570

Specialization and Cooperation in the Sewing Industry on the Trans-Caucasus, by V. F. Gopko, A. Ye. Gorenbayn, 7 pp.
RUSSIAN, per, Shveytnaya Prom, No 2, Mar, Apr 1964, pp 22-25.
JPRS 25572

Increase in the Productivity of Labor and Wages, by L. Kunel'skiy, 7 pp.
RUSSIAN, per, Sotsial Trud, No 4, 1964, pp 10-14.
JPRS 25616

Experimental Implementation of a New Bonus System for Managerial Personnel, Technicians and Employees Engaged in Industry, by V. Chupyr', 14 pp.
RUSSIAN, per, Sotsial Trud, No 5, 1964, pp 15-25.
JPRS 25616

Research in Norm Setting Conducted During 1964-1965, by A. Bugrov, S. Semenkevich, 8 pp.
RUSSIAN, per, Sotsial Trud, No 5, 1964, pp 81-86.
JPRS 25616

State of Chemical Industry in Bobruysk, by V. Varivonchik, 5 pp.
RUSSIAN, np, Sovet Belorussiya, 9 Apr 1964, p 2.
JPRS 25437

Increasing the Utilization of Industrial Capacities in the Belorussian SSR, 12 pp.
RUSSIAN, np, Sovet Belorussiya, 23 May 1964, p 2.
JPRS 25457

Specialization of Industry in the Baltic Republics, by V. Lein, 5 pp.
RUSSIAN, np, Sovet Latvya, 29 May 1964, p 2.
JPRS 25457

The Generosity of the Ugryum River, by S. Kosterin, 5 pp.
RUSSIAN, np, Sovet Rossiya, 12 May 1964, p 4.
JPRS 25662

Improve Trade in Industrial Goods, by S. Trifonov, 14 pp.
RUSSIAN, per, Sovet Torgoviya, No 5, 1964, pp 4-10.
JPRS 25570

Improving Trade, by M. Besspalov, 9 pp.
RUSSIAN, per, Sovet Torgoviya, No 5, 1964, pp 11-15.
JPRS 25570

Goals of the Scientific-Technical Society of Ferrous Metallurgy in Light on the Party Decisions on Accelerated Development of the Chemical Industry, by M. A. Pertsev, 7 pp.
RUSSIAN, per, Stal', No 5, 1964, pp 385-388.
JPRS 25516

Dneprovskoye Metallurgical Plant imeni Dzerzhinskiy -- 75 Years Old, by I. G. Filonov, 6 pp.
RUSSIAN, per, Stal', No 5, 1964, pp 389-391.
JPRS 25516

Standards and Specifications are the Basis of High Quality and Specialization in Industry, by N. A. Razumov, 9 pp.
RUSSIAN, per, Standartizatsiya, No 3, 1964, pp 3-8.
JPRS 25611

USSR
Economic (Contd)

Road Building and Pipeline Machinery, 6 pp.
RUSSIAN, per, Stroitel i Dorozhnye Mashiny, No 4, 1964, pp 1, 2.
JPRS 25661

Integrated Mechanization of Pipeline Building, by G. V. Zhdanovich, 5 pp.
RUSSIAN, per, Stroitel i Dorozhnye Mashiny, No 4, 1964, pp 3-5.
JPRS 25661

Equipment for Laying Underwater Lines, by V. P. Popov, 5 pp.
RUSSIAN, per, Stroitel i Dorozhnye Mashiny, No 4, 1964, pp 36-39.
JPRS 25661

The Hydrofoil Motorship Chayka, by I. I. Yerlykhin, 6 pp.
RUSSIAN, per, Sudostroyeniye, No 4, 1964, pp 1-4.
JPRS 25621

The Volga-Baltic Waterway, by Yu. P. Bondarevskiy, V. G. Pakhomov, 6 pp.
RUSSIAN, per, Transport Stroitel, No 11, 1963, pp 26-28.
JPRS 25621

Activity of Department of Economics of the Academy of Sciences USSR, by I. Lysenko, 10 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 2, 1964, pp 149-154.
JPRS 25736

Scientific Research Institute of Organization of Control and Norms Under Council of National Economy USSR, 6 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 2, 1964, pp 154-156.
JPRS 25736

Zonal Distribution of the Chemical Industry, by N. Nekrasov, 25 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 3, 1964, pp 24-35.
JPRS 25569

Material Stimulation of Best Use of Productive Capacities, by M. Fedorovich, 23 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 3, 1964, pp 52-62.
JPRS 25569

On the Question of Methodology of International Comparisons, by P. Bagriy, 11 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 3, 1964, pp 101-104.
JPRS 25569

On Statistical Comparisons of Indices of National Income, by E. Kudrova, 14 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 3, 1964, pp 105-109.
JPRS 25569

In the Scientific Council on Effectiveness of Basic Funds, Capital Investments and New Technology, by A. Shuster, 16 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 3, 1964, pp 146-150.
JPRS 25569

Plenum of the Scientific Council on Application of Mathematics and Computer Technology in Economic Investigations and Planning of the Academy of Sciences of the USSR, 12 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 3, 1964, pp 150-153.
JPRS 25569

Works of Scientists-Economists of Siberia and the Far East, by E. Lazutkin, 14 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 3, 1964, pp 153-157.
JPRS 25569

USSR
Economic (Contd)

Discussion of Material Incentive Systems,
by S. Skumilin, 7 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 4,
1964, pp 59-64.
JPRS 25616

Certain Problems in Improving the Quality
of Consumer Goods, by Ya. Orlov, 13 pp.
RUSSIAN, per, Voprosy Ekon, No 5, 1964,
pp 44-53.
JPRS 25572

The Relationship Between Supply and Demand as
a Factor in Price Formation, by V. Budaragin, 12 pp.
RUSSIAN, per, Voprosy Ekon, No 5, 1964,
pp 54-63.
JPRS 25570

The Transcaucasian Economic Region, by I. Prazyan,
5 pp.
RUSSIAN, np, Vyshka, 26 Apr 1964, p 2.
JPRS 25595

The Role of Consumers' Cooperatives in the
Purchase of Agricultural Products,
by A. P. Klimov, 9 pp.
RUSSIAN, per, Zakupki Sel'skokhoz Produktov, No 5,
1964.
JPRS 25570

Political

Izvestiya Scores Chinese Isolationism, 6 pp.
RUSSIAN, np, Izvestiya, 4 Jun 1964, p 4.
JPRS 25355

The Policy of Unity Versus the Policy of
Dissension, 7 pp.
RUSSIAN, np, Izvestiya, 6 Jun 1964, p 4.
JPRS 25355

The United Arab Republic in a New Stage, by
I. Belyayev, V. Cheprakov, 12 pp.
RUSSIAN, per, Kommunist, No 9, Jun 1964, pp 87-96.
JPRS 25654

The Nonaligned States and the Struggle for Peace,
by N. Pastukhov, 9 pp.
RUSSIAN, per, Kommunist, No 9, Jun 1964, pp 97-103.
JPRS 25654

May-Day Address of the Marshal of the Soviet Union,
by R. Ya. Malinovskiy, 11 pp.
RUSSIAN, np, Pravda, No 123, (16709), 2 May 1964,
pp 1, 3. 9693177
FTD-TT-64-535

Pravda Publishes Resolution of Presidium
of Central Committee of Mexican Communist
Party, 9 pp.
RUSSIAN, np, Pravda, 6 Jun 1964, p 3.
JPRS 25355

Pravda Explains Indian Communist Party
Appeal for Internal Unity, 5 pp.
RUSSIAN, np, Pravda, 23 Jun 1964, p 3.
JPRS 25676

Military

The Effect of Nuclear Armed Missile Systems on
the Use of Aircraft at Sea, by V. G. Rog, 7 pp.
RUSSIAN, per, Morskoy Sbornik, No 6, 1963,
pp 31-37.
Navy Tr 3848/ONI 1002

Problems in the Employment of ABC Combat Agents
in Narrow Seas, by Kuzman Smileski, 6 pp.
CROATIAN, per, Mornaricki Glasnik, No 2,
Mar-Apr 1963, pp 190-204.
Navy Tr 3849/ONI 1001

Geographic

On the Periphery of the Great Gobi Desert,
by D. Chulumbat, 5pp.
RUSSIAN, per, Sovremennaya Monografiya, 1964, pp 8, 9.
(Call No DS935 512 1964, No 3, Eng Tr)
Army Map Service

Sociological

Social Science: A Textbook for Soviet Secondary
Schools, by G. Kh. Shakhnazarov, A. D. Boborykin,
et al, 330 pp.
RUSSIAN, bk, Obshchestvovedeniye. Uchebnik dlya
Vypusknogo Klassa Sredney Shkoly i Srednikh
Spetsial'nykh Uchebnykh Zavedeniy, 1963, 384 pp.
JPRS 24988

Against Dogmatism and Vulgarization in Literature
and the Arts, 22 pp.
RUSSIAN, per, Kommunist, No 9, Jun 1964, pp 9-26.
JPRS 25654

The Approval of Friends and the Forced Recognition
of Enemies, by I. Kulikova, 7 pp.
RUSSIAN, per, Kommunist, No 9, Jun 1964, pp 104-109.
JPRS 25654

Spiritual Poverty, by B. Leont'yev, 11 pp.
RUSSIAN, per, Kommunist, No 9, Jun 1964, pp 110-118.
JPRS 25654

EASTERN EUROPE

Economic

The Strengthening of the Socialist Awareness of Workers in Respect to Work and Property, 13 pp.

ALBANIAN, per, Rruga e Partise, Vol XI, No 3, 1964, pp 7-16.

JPRS 25328

The Years 1964 and 1965 Years for the Construction of Great Industrial Works, by Spiro Koleka, 10 pp.

ALBANIAN, per, Rruga e Partise, Vol XI, No 5, 1964, pp 17-24.

JPRS 25328

A Major Activity of Trade Union Work is With Individuals, by Qimo Kocani, 6 pp.

ALBANIAN, np, Zeri i Popullit, 19 Jun 1964, pp 2, 3.

JPRS 25684

The Relationship Between Production, Norms, and Average Wages, by Harilla Papaorgji, 5 pp.

ALBANIAN, np, Zeri i Popullit, 24 Jun 1964, pp 2, 3.

JPRS 25728

Amendments and Supplements to the Regulation on Capital Construction, 7 pp.

BULGARIAN, np, Durzhaven Vestnik, No 44, 5 Jun 1964, pp 2, 3.

JPRS 25374

Bulgarian National Bank Wage Control, by Iliya Gevrekov, 9 pp.

BULGARIAN, per, Finansi i Kredit, No 4, Jun 1964, pp 3-11.

JPRS 25655

The Importance of Fulfillment of Obligations, by Aleksandur Rachev, 8 pp.

BULGARIAN, per, Finansi i Kredit, No 4, Jun 1964, pp 43-50.

JPRS 25655

Workers' Insurance Network, by Yovko Yovkov, 9 pp.

BULGARIAN, per, Finansi i Kredit, No 4, Jun 1964, pp 51-58.

JPRS 25655

Fulfillment of the 1964 Plan for the Chemical Industry, 5 pp.

BULGARIAN, per, Khimiya i Industriya, No 3, 1964, pp 81, 82.

JPRS 25738

Development of Domestic Trade, 13 pp.

BULGARIAN, per, Naruchnik na Agitatora, No 10-13, 1964, pp 35-48.

JPRS 25334

Fifteen Years in the Development of CEMA, by Atanas Atanasov, 9 pp.

BULGARIAN, per, Naruchnik na Agitatora, No 15, Apr 1964, pp 11-24.

JPRS 25680

Payment of Wages in TKZS, by Petur Khristov, 6 pp.

BULGARIAN, per, Naruchnik na Agitatora, No 17, Apr 1964, pp 9-20.

JPRS 25672

Grain Production in Bulgaria, by Vasil Toshev, 6 pp.

BULGARIAN, per, Naruchnik na Agitatora, No 17, Apr 1964, pp 34-43.

JPRS 25672

Economic Collaboration Between Socialist Nations, by Sava Kulbokov, 20 pp.

BULGARIAN, per, Novo Vreme, No 5, 1964, pp 14-29.

JPRS 25550

Eastern Europe Economic (Contd)

Livestock Prices and the Price Establishment System, by Vladimir Danchev, 5 pp.

BULGARIAN, per, Otchetnost i Kontrol v Selakotostopanstvo, No 4, 1964, pp 181-184.

JPRS 25362

Establishing a Permanent CEMA Organ for the Development of Inventions and Trademarks, by Petko Penev, 8 pp.

BULGARIAN, per, Ratsionalizatsiya i Standardizatsiya, No 3, 1964, pp 5-9.

JPRS 25639

International Socialist Division of Labor Discussed, by Stoyan Shalamanov, 9 pp.

BULGARIAN, per, Trud i Tseni, No 6, 1964, pp 1-10.

JPRS 25746

Some Problems of Further Development of Self Management and Economic Systems, by Franjo Raknic, 27 pp.

CROATIAN, per, Ekonomski Pregled, Vol XV, No 1, 2, 1964, pp 1-18.

JPRS 25330

Some Problems of Planning and Marketing in the Yugoslav Economic System, by Mirko Frkovic, 31 pp.

CROATIAN, per, Ekonomski Pregled, Vol XV, No 1, 2, 1964, pp 19-39.

JPRS 25330

Some Actual Problems in the System of Internal Distribution of Income, by Roman Albrecht, 27 pp.

CROATIAN, per, Socijalna Politika, No 3, 1964, pp 257-279.

JPRS 25512

Berlin Statistics, by Heise, 19 pp.

GERMAN, bk, Berlin Statistics, Berlin, 1964, pp 45-49. (Call No IE6 IR3, 1964, Eng Tr)

Army Map Service

Co-Responsibility of VVBs in Licensing Transactions, by H. Priemer, W. Politze, 8 pp.

GERMAN, per, Aussenhandel, No 6, pp 14-16.

JPRS 25680

Development of East German Air Freight, by S. Stempniewski, 22 pp.

GERMAN, per, Aussenhandel, No 6, 1964, pp 35-42.

JPRS 25758

Tasks of Foreign Trade in 1965, by H. Koehler, J. Lyschik, 7 pp.

GERMAN, per, Aussenhandel und Innerdeutscher Handel, No 5, 1964, pp 1-3.

JPRS 25746

Economic Cooperation Based on Equality Between East Germany and the Capitalist Economic Area, by K. H. Domdey, 9 pp.

GERMAN, per, Aussenhandel und Innerdeutscher Handel, No 5, 1964, pp 30-33.

JPRS 25746

International Conference Dealing With Problems of Foreign Trade Profitability, by G. Otto, 6 pp.

GERMAN, per, Aussenhandel und Innerdeutscher Handel, No 6, 1964, pp 11-13.

JPRS 25680

German Bridge Building in Irak, by Dieter Schoen, 18 pp.

GERMAN, per, Brucke und Strasse, 1963, pp 532-537. (Call No not Given, Eng Tr)

Army Map Service

Current Problems of International Economic Relations, by Ingrid Uhlemann, 10 pp.

GERMAN, per, Deutsche Aussenpolitik, Vol V, 1964, pp 425-430.

JPRS 25445

**Eastern Europe
Economic (Contd)**

New Prices for Electric Power, Gas, and Heating as Established by Price Regulations No 3003 and 3004, by F. Marx, E. Waldheim, 7 pp.
GERMAN, per, Energietechnik, Vol XIV, No 5, 1964, pp 193-196.
JPRS 25572

Preparation of Scientific Bases for Systematic Development of Living Standard, by Alfred Keck, 6 pp.
GERMAN, per, Der Handel, No 6, 1964, pp 241-244.
JPRS 25685

The New Quota Lists Under the Trade Agreement Between Poland and Austria, 7 pp.
GERMAN, per, Internationale Wirtschaft, 12 Jun 1964, pp 1, 2.
JPRS 25746

Assignments of the Wave Propagation Laboratories of the Central Radio and Television Office RFZ of the East German Post Office DP at Kolberg Near Berlin, by U. Kuhn, F. Taumer, 12 pp.
GERMAN, per, Nachrichtentechnik-Elektronik, Vol XIV, No 4, 1964, pp 134-139.
JPRS 25249

Significance of Automation in Ferrous Metallurgy in the GDR, by Walter Liebig, 10 pp.
GERMAN, per, Neue Huette, No 6, 1964, pp 321-325.
JPRS 25685

The Czechoslovak Economic Crises in the Light of the 1963 Plan Results, by Robert F. Lamberg, 14 pp.
GERMAN, per, Osteuropa Wirtschaft, Apr 1964, pp 63-72.
JPRS 25620

1963 Successful Year for East Germany's Ocean-Going Shipping, by M. Maass, 11 pp.
GERMAN, per, Seeverkehr, Vol IV, No 4, 1964, pp 207-211.
JPRS 25075

The 1963 Fruit Tree Census, by Herbert Krugler, Rigo Trend'burg, 10 pp.
GERMAN, per, Statistische Praxis, No 4, 1964, pp 95-98.
JPRS 25218

Cooperative Work in the State Owned Enterprises VVB's, by Horst Langer, 5 pp.
GERMAN, np, Die Wirtschaft, No 19, 11 May 1964, p 11.
JPRS 25620

More Flexible Supply of Concrete, by H. Passler, 5 pp.
GERMAN, np, Die Wirtschaft, No 19, 11 May 1964, pp 12, 13.
JPRS 25758

Tasks of Information and Documentation Offices, 5 pp.
GERMAN, np, Die Wirtschaft, No 21, 25 May 1964, p 10.
JPRS 25655

The World Trade Conference and the Position of the GDR on the Capitalist World Market, by Karl-Heinz Domdey, 20 pp.
GERMAN, per, Wirtschafts-Wissenschaft, No 4, 1964, pp 611-629.
JPRS 25322

Result of 1963 Development of Agricultural Producer Cooperatives (LPG's), by D. Muller, 8 pp.
GERMAN, per, Z fuer Agrarökonomik, Vol VII, No 6, 1964, pp 161-163.
JPRS 25643

**Eastern Europe
Economic (Contd)**

Evaluation of the 1963 Statistics of the National Forest Preserve Observation and Warning Service and the Damage Prognosis for 1964, by Hubert Pagony, 9 pp.
HUNGARIAN, per, Az Erdo, Vol XIII, No 2, 1964, pp 60-66.
JPRS 25248

Final Accounting of Production Cooperatives in 1963, by Lovas Marton, 8 pp.
HUNGARIAN, per, Figyelo, 13 May 1964, p 8.
JPRS 25248

The 1964 Tasks of Navigation, by Jozsef Belay, 14 pp.
HUNGARIAN, np, Kozlekedesi Kozlony, No 14, 5 Apr 1964, pp 213-217.
JPRS 25374

The Budapest Suburban Shuttle Service, by Lajos Barany, Bela Papai, 26 pp.
HUNGARIAN, per, Kozlekedestudomanyi Szemle, Vol XIV, No 3, 1964, pp 97-107.
JPRS 25242

Directive No 4/1964, Mg. E. 3. FM of the Minister of Agriculture Concerning the Amalgamation of Certain Operational Units Dealing With Animal Husbandry, 7 pp.
HUNGARIAN, per, Mezogazdasagi Ertesito, Vol XV, No 8, 15 Jan 1964, pp 47-49.
JPRS 25218

Accounting Prices for Use by Production Cooperatives in 1964, 5 pp.
HUNGARIAN, per, Mezogazdasagi Ertesito, Vol XV, No 14, 7 Apr 1964, pp 227-229.
JPRS 25248

The 1961 Input-Output Table on Hungarian Production, by Albert Racz, 38 pp.
HUNGARIAN, per, Statistikai Szemle, Vol XLII, No 6, 1964, pp 571-591.
JPRS 25655

New Prices for Improved Seeds, 10 pp.
HUNGARIAN, per, Termeloszovetkezetek Beruhazasi, Tervezesi, Penzugyi, Jogi Tanacsadois, a Supplement to Magyar Mezogazdasag, No 23, 1964.
JPRS 25643

Certain Current Problems in Residential Construction, by Maria Piechotkova, 8 pp.
POLISH, per, Architektura, No 3/196, Mar 1964, pp 89-91.
JPRS 25334

Exports of the Oswiecim Chemical Plant in 1960-1963, by Maria Bugalska, 8 pp.
POLISH, per, Chemik, No 4, 1964, pp 119-122.
JPRS 25445

Mechanization in Bridge Construction, by Marian Plerozynski, 7 pp.
POLISH, per, Drogownictwo, Vol XIX, No 5, 1964, pp 126, 129, 130.
JPRS 25334

The Polish Agricultural Machinery Industry Under CEMA, by Jan Prokop, 6 pp.
POLISH, per, Mechanizacja Rolnictwa, No 9(153), 1964, pp 11, 12.
JPRS 25639

Significance of Scientific Research for the Development of the Chemical Industry, by Michal Smialowski, 18 pp.
POLISH, per, Nowe Drogi, No 5, 1964, pp 51-64.
JPRS 25425

Eastern Europe
Economic (Contd)

Problems of the Development of the Automation Industry, by Roman Mieloch, 7 pp.
POLISH, per, Nowe Drogi, No 5, 1964, pp 108-113.
JPRS 25425

Agricultural Cooperation Among CEMA Countries, by Stefan Wawrzynczak, 6 pp.
POLISH, per, Nowe Rolnictwo, No 11, 1-15 Jun 1964, pp 14-16.
JPRS 25680

The Economy During the Past 20 Years, by Oskar Lange, 9 pp.
POLISH, np, Polityka, No 22, 30 May 1964, pp 1, 4.
JPRS 25446

Poland for Mechanization Development of Loading Operations in Rail and Road Transport to 1980, 16 pp.
POLISH, per, Przegląd Komunikacyjny, No 5, 1964, pp 177-184.
JPRS 25572

Development Problems of Maritime Shipping During 1966-1970., by Witold Strak, 8 pp.
POLISH, per, Technika i Gospodarka Morska, No 5, 1964, pp 130-132.
JPRS 25374

Development of Polish Shipping Interests in the Far East, by Janusz Mondalski, 8 pp.
POLISH, per, Technika i Gospodarka Morska, No 5, 1964, pp 133-135.
JPRS 25374

Certain Bank Problems in the Light of Resolutions of the Fourth Party Congress, by Adam Zebrowski, 10 pp.
POLISH, per, Wiadomości Narodowego Banku Polskiego, No 6, 1964, pp 177-181.
JPRS 25747

The Bank's Role in Realizing Foreign Trade Transactions, by Tadeusz Choliński, 10 pp.
POLISH, per, Wiadomości Narodowego Banku Polskiego, No 6, 1964, pp 181-184.
JPRS 25747

Incentives in the System of Financing New Technology, by Jozef Trendota, 6 pp.
POLISH, np, Zycie Gospodarcze, No 22, 31 May 1964, p 3.
JPRS 25446

Prospects in Light Industry, by Włodzimierz Lechowicz, 56 pp.
POLISH, np, Zycie Gospodarcze, No 23, 7 Jun 1964, pp 1, 7.
JPRS 25572

Excerpts From Rumanian Book "Problems of the Creation and Development of the Technical and Material Base of Socialism in the Rumanian People's Republic", by C. Iacobovici, C. Ionescu. (SF-3292)
RUMANIAN, bk, Probleme ale Creării și Dezvoltării Bazei Tehnice-Materiale a Socialismului în R.P.R., 1963, pp 37-97; 157-222.
*JPRS

For a Rational Utilization of Land Resources, by Vasile Pascanu, 9 pp.
RUMANIAN, np, Agricultura Socialista, Vol II, No 19(66), 7 May 1964, pp 1, 2.
JPRS 25248

Increasing the Efficiency of Bank Control in Utilizing Investment Funds, by Tiberiu Horvath, 16 pp.
RUMANIAN, per, Finante Si Credit, Vol X, No 4, 1964, pp 3-16.
JPRS 25446

Eastern Europe
Economic (Contd)

National Conference of Railroad Engineers and Technicians, 7 pp.
RUMANIAN, per, Lupta CFR, 9 Apr 1964, pp 1, 4.
JPRS 25572

Ratio of the Growth Rates of the National Income and of the Total Social Product, by I. Traistaru, 13 pp.
RUMANIAN, per, Probleme Economice, Vol XVII, No 4, Apr 1964, pp 3-12.
JPRS 25330

Aspects of the Development of Socialist Production Relations in the Collective Sector, by C. Gruici, 17 pp.
RUMANIAN, per, Probleme Economice, Vol XVII, No 4, 1964, pp 13-27.
JPRS 25362

Better Exploitation of Raw Materials in Light Industry, by St. Stefanescu, 17 pp.
RUMANIAN, per, Probleme Economice, Vol XVII, No 4, 1964, pp 40-54.
JPRS 25334

Some Observations on a Book Dealing With Economic Relations Among Socialist Countries, by Costin Murgescu, 14 pp.
RUMANIAN, per, Viata Economica, Vol II, No 23, 5 Jun 1964, pp 10, 11.
JPRS 25445

Some Factors in Increasing Production on Peasant Farms, by Petar Milanovic, 17 pp.
SERBIAN, per, Ekonomika Poljoprivrede, No 5, 1964, pp 21-33.
JPRS 25672

The Economics of Leasing Farm Land, by Stevan Silbiger, 11 pp.
SERBIAN, per, Ekonomika Poljoprivrede, No 5, 1964, pp 65-71.
JPRS 25672

Yugoslavia in the International Division of Labor, by Milan Aleksic, 21 pp.
SERBIAN, per, Ekonomist, No 1, Jan-Mar 1964, pp 1-15.
JPRS 25322

The Role and Prospects of River Transportation, by Mihailo Aleksic, 25 pp.
SERBIAN, per, Ekonomist, No 1, Jan-Mar 1964, pp 38-55.
JPRS 25242

The Social Plans of the Socialist Republics for 1964, by Milentije Pedsakovic, 30 pp.
SERBIAN, per, Finansije, No 3, 4, 1964, pp 97-117.
JPRS 25620

Balancing the 1963 Federal Budget, by Aleksandar Jovanovic, 18 pp.
SERBIAN, per, Finansije, No 3, 4 1964, pp 182-194.
JPRS 25620

The State and Prospects of the Yugoslav Motor Vehicle Industry, by Milorad Vukovic, 36 pp.
SERBIAN, per, Produktivnost, No 5, 1964, pp 315-325.
JPRS 25685

The Development Necessary in Transportation and the Automotive Industry in Yugoslavia Between 1964 and 1970, by Predrag Radivojevic, Ivan Vukovic, 47 pp.
SERBIAN, per, Produktivnost, No 5, 1964, pp 336-348.
JPRS 25685

Eastern Europe
Economic (Contd)

The Development of the Petroleum Industry in Yugoslavia and the Importance of Its Products as a Raw Materials Base for the Organic Chemical Industry, by Kornelije Mirkov, 15 pp.
SERBIAN, per, Tehnika, No 6, 1964, pp 1112-1117.
JPRS 25738

Agricultural Management Problems, by Svetolik Popovic, 24 pp.
SERBO-CROATIAN, per, Ekonomika Poljoprivrede, No 2, 1964, pp 3-15.
JPRS 25643

Agricultural Production in the 1964 Yugoslav Social Plan, by Dzemal Drace, 9 pp.
SERBO-CROATIAN, per, Ekonomika Poljoprivrede, No 2, 1964, pp 18-24.
JPRS 25643

Development of Yugoslav Industry, by Stevan Chonkic, 12 pp.
SERBOCROATIAN, np, Privredni Pregled, No 2530, 23 May 1964, pp 2, 3.
JPRS 25655

Investments in 1963 and at the Beginning of 1964, by V. Pejovski, 6 pp.
SERBOCROATIAN, per, Vesnik Jugoslovenske Investicione Banke, Vol VIII, No 87, Mar 1964, pp 3-5.
JPRS 25446

Summary of the Rules Governing the Railroad Freight Car Pool of the CEMA Countries, by Antonin Kabrt, 16 pp.
SLOVAK, per, Zeleznicar, No 6, 1964, pp 33-48.
JPRS 25732

Political

The Problem of State Power the Basic Problem of Our Peoples Revolution, by Xhemil Frasherri, 12 pp.
ALBANIAN, per, Rrugat e Partise, Vol XI, No 5, 1964, pp 38-47.
JPRS 25328

Albanians Mark 23d Anniversary of German Attack on USSR, Accuse Khrushchev of Joining Forces With Imperialism, by Halim Ramohito, 8 pp.
ALBANIAN, np, Zeri i Popullit, 21 Jun 1964, p 4.
JPRS 25626

Ukase No 287 Promulgating the Law Amending and Supplementing the Law on People's Councils, 13 pp.
BULGARIAN, per, Durzhaven Vestnik, No 47, 16 Jun 1964, pp 1-4.
JPRS 25673

Bulgarian Party Organ Accuses Chinese Leaders of Neo-Trotskyism, by Kostadin Baychinski, 16 pp.
BULGARIAN, per, Novo Vreme, No 6, 1964, pp 12-26.
JPRS 25626

Bulgarian Party Organ Criticizes Chinese Stand, by Petko Rusev, 17 pp.
BULGARIAN, per, Partien Zhivot, Vol VIII, No 6, Apr 1964, pp 8-20.
JPRS 25576

Eastern Europe
Political (Contd)

Czech Communist Party Continues Its Attack on Chinese Leaders, by Frantisek Havlicek, 11 pp.
CZECH, per, Nova Mysl, No 5, 1964, pp 530-537.
JPRS 25355

East German Party Organ Criticizes Chinese Textbook, Dialectical Materialism, by Rudolf Herold, Gisela Kaderschafka, et al, 27 pp.
GERMAN, per, Einheit, No 6, 1964, pp 72-89.
JPRS 25626

Strobl Reveals Muhri's Secret Report to Central Committee, by Franz Strobl, 6 pp.
GERMAN, per, Rote Fahne, No 12 (16), 15 Jun 1964, pp 13-15, 18, 19.
JPRS 25658

Hungarians Euogize CPSU, Chide Chinese, by Laszlo Fencsik, 7 pp.
HUNGARIAN, per, Partelet, No 6, 1964, pp 3-9.
JPRS 25355

Hungarian Party Organ Scores Chinese Dissidence, by Ivan Harsanyi, 12 pp.
HUNGARIAN, per, Partelet, No 7, 1964, pp 3-13.
JPRS 25626

Gyula Kallai Explains Hungarian Foreign Policy, by Gyula Kallai, 20 pp.
HUNGARIAN, per, Tarsadalmi Szemle, Vol XIV, No 7, 1964, pp 1-22.
JPRS 25658

Activity of Party Organizations in Rural Areas, by Henryka Kirlinska, 10 pp.
POLISH, per, Nowe Drogi, No 5, 1964, pp 138-144.
JPRS 25449

The Activity of Study and Control Carried Out by the Permanent Commissions of the People's Councils, by Mircea Anghene, 14 pp.
RUMANIAN, per, Justitia Noua, Vol V, May 1964, pp 3-12.
JPRS 25726

All Powerful Leninist Teaching, by Teodor Marinescu, 8 pp.
RUMANIAN, per, Lupta de Clasa, No 4, 1964, pp 36-42.
JPRS 25449

The Economic Education of Cadres, by Florian Danalache, 14 pp.
RUMANIAN, per, Lupta de Clasa, No 4, 1964, pp 57-68.
JPRS 25449

The Work of the Commission on Changes and Additions to the Charter of the Alliance of Communists of Yugoslavia, by Stipe Duzevic, 6 pp.
SERBOCROATIAN, np, Komunist, 28 May 1964, p 3.
JPRS 25245

Military

Extract From Ministerial Council Decree No 10 of 25 April 1964 Governing the Establishment of Border Zone on the State Frontier of the People's Republic of Bulgaria, 6 pp.
BULGARIAN, per, Durzhaven Vestnik, No 42, 29 May 1964, pp 1, 2.
JPRS 25450

Eastern Europe
Military (Contd)

Law on Decorations, 5 pp.
CROATIAN, per, Sluzbeni List SFRJ,
29 April 1964, pp 354-359.
JPRS 25450

Handbook for Soldiers of the Chemical Service.
(DC-10726)
GERMAN, bk, Handbuch fuer Soldaten des Chemischen
Dienstes, 1964, pp 177-178; 223-227; 361-351.
JPRS

The Standard Tank Attained Its Goal,
Exklusiv-Dienst, 5 pp.
GERMAN, per, Wehr und Wirtschaft, 1963, p 263,
(Call No Not Given, Eng Tr).
Army Map Service
The AMX-30 and the German Standard Tank, by Grt,
5 pp.
GERMAN, per, Wehr und Wirtschaft, 1963, p 264-265.
(Call No Not Given, Eng Tr)
Army Map Service
The Combat Tank Program of the Federal Armed
Forces, 15 pp.
GERMAN, per, Wehr und Wirtschaft, 1963, pp 385-388.
(Call No Not Given, Eng Tr)
Army Map Service

Geographic

Concerning Lines of Equal Deformation
by J. Bolliger, 11 pp.
GERMAN, per, Geographica Helvetica, Vol XIX, No 1,
1964, pp 42-49. (Call No GI G27 v 19, No 1, 1964, Eng Tr)
Army Map Service

Eastern Europe
Sociological

Let Us Improve the Lessons in Production in the
Schools of General Education, by Pellumb Gjehrea,
7 pp.
ALBANIAN, per, Aresimi Popullor, Mar/Apr 1964,
pp 45-56.
JPRS 25728

Our Socialist Albania is Being Constructed
in a Struggle Against Difficulties, by Dervish Gjiriti,
9 pp.
ALBANIAN, np, Bashkimi, 19 Jun 1964, pp 2, 3.
JPRS 25684

Albanian Writer Scores Literary Revisionism,
by Razi Brahimi, 7 pp.
ALBANIAN, per, Ylli, No 5, 1964, pp 11, 22.
JPRS 25626

More Attention to the Technical and Professional
Education of Agricultural Machine Workers,
by Aleko Aleksai, 12 pp.
ALBANIAN, per, Rruga e Partise, Vol XI,
No 5, 1964, pp 56-55.
JPRS 25328

Eastern Europe
Sociological (Contd)

Ministerial Council Decree No 18, Dated 18 May
1964, Governing the Organization of the Operation
of Departmental Scientific Research Institutes, De-
signing Institutes, Specialized Construction Bureaus,
Technical Development Bases, and Scientific
Research Sectors in Higher Educational Institutions
for the State Committee for Scientific and Technical
Progress, 5 pp.
BULGARIAN, np, Durzhaven Vestnik, No 42,
29 May 1964, pp 2, 3.
JPRS 25375

Temporary Regulation Governing the Operational
Organization of the Aforementioned Scientific
Research Institutes, Bureaus, and Sectors in
Higher Educational Institutions, 9 pp.
BULGARIAN, np, Durzhaven Vestnik, No 42,
29 May 1964, pp 4-6.
JPRS 25375

Ministry of Public Health and Social Welfare
Regulations Governing the Maternity and
Infants Home, by K. Ignatov, 9 pp.
BULGARIAN, per, Durzhaven Vestnik, No 53,
7 Jul 1964, pp 15, 16.
JPRS 25569

KAFKA Became Symbol of Suppressed Word,
by Jochen Ziem, 5 pp.
GERMAN, per, Frankfurter Rundschau,
23 May 1964, p 4.
JPRS 25331

Under the Sign of the White Stars -- An American
in Berlin, by Gert Prokop, 15 pp.
GERMAN, per, Neue Berliner Illustrierte, Vol XII-
XVII, 1964, No 3, 4, Mar; No 1-4, Apr.
ACSI I-5109
ID 2204025364

The Humanization of Work, 36 pp.
POLISH, np, Kultura, No 20, 17 May 1964,
pp 1, 6, 7.
JPRS 25331

The Internal Security Service in the Opstina,
by Vojin Lukic, 8 pp.
SERBOCROATIAN, per, Komuna, Vol XI, No 4,
1964, pp 2-5.
JPRS 25375

Western Europe

Economic

Telecommunications, by G. Gerlif, 17 pp.
DANISH, per, Ingenioren, No 1, 1964, pp 35-41.
ACSI I-4994
ID 2204025164

The Needs of the Labor Union Movement in
Spain, by Ramon Vasquez, 5 pp.
FRENCH, per, l'Internationale, No 22, May 1964,
p 6.
JPRS 25355

Africa in the Aid Quarrels, by H. Chretien-Marquet,
6 pp.
FRENCH, per, La Vie Africaine, No 47, May 1964,
pp 32-33.
JPRS 25384

Western Europe
Economic (Contd)

French Central Committee for Overseas Territories Discusses Aid and Cooperation, by Sita Bella, 5 pp.
FRENCH, per, La Vie Africaine, No 47, May 1964, pp 34, 35.
JPRS 25384

Report on Work Done by the Construction Division 1961-62, by Ministry of Development and Public Works, Division of Construction, 42 pp.
SPANISH, rpt, Informe General del Ministerio de Fomento y O. O. P. P., Nicaragua, 1962, pp 7-34. (Call No TA31 N5 N38 1961/62, Eng Tr)
Army Map Service

V. T. E. Telephone Services, 17 pp.
SPANISH, rpt, Los Servicios Telefonicos de V. T. E. Uruguay, pp 1-17 (Call No Not Given, Eng Tr)
Army Map Service

Political

Ernest Burnell's Report, by Ernest Burnelle, 10 pp.
FRENCH, np, Le Drapeau Rouge, 13 May 1964, p 3.
JPRS 25355

Text of Belgian-Bulgarian Joint Communiqué on 22 June-3 July 1964 Meeting, 5 pp.
FRENCH, np, Drapeau Rouge, 7 Jul 1964, pp 1, 3.
JPRS 25626

The Creation of the PSIUP, by Rocco Astori, 7 pp.
FRENCH, per, Est et Quest, No 320, 1-15 May 1964, pp 26-28.
JPRS 25355

Membership of New PCF Central Committee Analyzed, 13 pp.
FRENCH, per, Est et Quest, No 323, 16-30 Jun 1964, pp 7-12.
JPRS 25676

French Communists Reported Discussing Chinese Deviation, by Claude Harmel, 8 pp.
FRENCH, per, Est et Quest, No 323, 16-30 Jun 1964, pp 13-16.
JPRS 25576

Trotskyite Organ Analyzes the Conflict, 5 pp.
FRENCH, per, Sous le Drapeau du Socialisme, May 1964, pp 5, 6.
JPRS 25638

Gerard Spitzer Comments on PCF 17th Congress, by Gerard Spitzer, 5 pp.
FRENCH, per, La Voie Communiste, No 45, Jun, Jul 1964, p 11.
JPRS 25676

Belgian Dissident Journalist Interviews Chen Y, by Arnold Hauwaert, 9 pp.
FRENCH, np, La Voix du Peuple, No 24, Jun 1964, pp 8, 9.
JPRS 25405

Edgar Woog's Report to Swiss Communist Party, by Edgar Woog, 7 pp.
GERMAN, np, Vorwaerts, 21 May 1964, p 4.
JPRS 25355

Austrian Communist Part States Its Views, by F ranz Muhri, 8 pp.
GERMAN, per, Weg und Ziel, No 3, 1964, pp 139-146.
JPRS 25355

Western Europe
Political (Contd)

Austrian Communist Party Pre-Congress Discussion, 5 pp.
GERMAN, per, Weg und Ziel, No 3, 1964, pp 273-277.
JPRS 25355

Italian Communist Analysis of Pura, by Saverio Turino, 6 pp.
ITALIAN, np, Rinascita, 20 Jun 1964, pp 11, 12.
JPRS 25489

Ingrao and a Reader, Marco Maestro, Discuss PCI Democracy, by Pietro Ingrao, 13 pp.
ITALIAN, np, Rinascita, No 27, 4 Jul 1964, pp 5-7.
JPS 25576

Rome Weekly Publishes Imaginary Discussion With Khrushchev, Togliatti, Russell, Kautsky, Luxemburg, and Turati, Using Old Quotation, 7 pp.
ITALIAN, np, l'Umanita, 30 Jun 1964, p 5.
JPRS 25576

Belgian Communist Party Chief Burnelle Defends CPSU Against Chinese and Dissident Belgian Criticism, by Ernest Burnelle, 5 pp.
RUSSIAN, np, Pravda, 6 Jul 1964, p 3.
JPRS 25658

Nils Holmberg Calls for Revolutionary Approach, by Nils Holmberg, 8 pp.
SWEDISH, np, Ng Dag, I. 19 Jun 1964, p 2; II. 24 Jun 1964, p 2.
JPRS 25576

Swedish Communist Party Chief Hermansson Answers Holmberg, by C. H. Hermansson, 5 pp.
SWEDISH, np, Ng Dag, 27 Jun 1964, p 2.
JPRS 25576

Military

Air Cushion Vehicles, by Freddy Capron, 7 pp.
FRENCH, per, Nos Forces, No 99, 15 Jan 1964, pp 28-33.
ACSI I-4830
ID 2204020264

The Future of the French Merchant Marine, by R. Labbe, 19 pp.
FRENCH, per, La Revue Maritime, No 206, Jan 1964, pp 42-57.
Navy Tr 3853/ONI 998

The Minister of State - In Charge of Overseas Departments and Territories, by Pierre Rolland, 59 pp.
FRENCH, per, Terres Australes et Antarctiques Francaises, No 18, Jan-Mar 1962, Navy Tr 3854/ONI 921

The Army Geographic Service and Its Work, 8 pp.
GREEK, per, Dheltion Yeografikis Ipiresias Stratou, No 73, 74, 1959, pp 1-5. (Call No GA101 G79, No 73, 74, Eng Tr)
Army Map Service

Current Events in Civil Defense, 13 pp.
SWEDISH, per, Aktuellt om Civilforsvar, No 8, 15 Apr 1964.
ACSI I-5121
ID 2204027664

Western Europe
Sociological

Religious Beliefs of the Bayeke, by F. Grevisse, 19 pp.
FRENCH, rpt, Bulletin des Juridictions Indigenes et du Droit Coutumier Congolais, Vol V, 1937, 1938, pp 5-16.
JPRS 25384

The Laveran Hospital at Marseilles, 20 pp.
FRENCH, per, Bulletin Technique du Genie Militaire, 1963, pp 219-244. (Call No IE6 IC26 II-12, Eng TF)
Army Map Service

The Intelligentsia and Socialism an Austrian Communist Analysis, by Jiri Hajek, 7 pp.
GERMAN, per, Weg und Ziel, No 5, May 1964, pp 297-303.
JPRS 25355

AFRICA

Economic

British Organizations Concerned With Africa, 11 pp.
FRENCH, per, Afrique, No 33, Apr 1964, pp 14-18.
JPRS 25335

French Industry in Algeria and Problems of the Moment, by Barbeau, 5 pp.
FRENCH, np, Cooperation Hebdo, No 37, 15 May 1964, pp 1,3.
JPRS 25335

Should Our Fiscal System be Reformed, 6 pp.
FRENCH, np, Le Courrier de Madagascar, 15, 16, 19 May 1964.
JPRS 25335

The Economic and Financial Situation of the Congo Leopoldville in 1963, 36 pp.
FRENCH, per, Etudes Congolaises, Vol VI, No 4, 1964, pp 1-36.
JPRS 25335

Ministry of National Economy Decree No 64-175 of 8 June 1964 Determining the Organization of the Socialist Industrial Sector, 10 pp.
FRENCH, per, Journal Officiel, Vol III, No 50, 19 Jun 1964, pp 690-693.
JPRS 25610

Economic Development in Morocco in 1963, 8 pp.
FRENCH, np, Les Phares, No 143, 13 Jun 1964, pp 4, 6.
JPRS 25610

Operation Livestock-Raising, 6 pp.
FRENCH, np, Les Phares, No 143, 13 Jun 1964, pp 5, 7.
JPRS 25610

The National Sugar Refinery in Beth, 5 pp.
FRENCH, np, Les Phares, No 143, 13 Jun 1964, pp 8, 9.
JPRS 25610

Africa
Economic (Contd)

Role of Tunisian Bank in Economic Development, 12 pp.
FRENCH, np, La Presse de Tunisie, 2, 4 Jul 1964, p 3.
JPRS 25693

Planning Problems in the Liberated Countries of Asia and Africa, by E. Utikin, 13 pp.
RUSSIAN, per, Plan Khoz, No 6, 1964, pp 81-89.
JPRS 25256

Port Achievements in the Provinces of IFNI and Sahara, by Vicente Caffarena Acena, 11 pp.
SPANISH, per, Africa, No 4, 1964, pp 237-243.
JPRS 25693

Political

Interview With AKFM President Rabemananjara on Literature and Politics, by Max Croce, 11 pp.
FRENCH, per, Le Courrier de Madagascar, 24 Jun 1964, pp 1, 6, 25 Jun 1964, pp 1, 7.
JPRS 25610

The Algerian Revolution Following the FLN Congress, by M. Pablo, 9 pp.
FRENCH, per, Sous le Drapeau du Socialisme, No 5, 1964, pp 1-4.
JPRS 25335

African Commission of 4th International Backs Khrushchev Lin in North Africa, 6 pp.
FRENCH, per, Sous le Drapeau du Socialisme, No 6, 1964, pp 4-6.
JPRS 25576

Socialism is Yet to Come, by Pierre Francois, 7 pp.
FRENCH, per, La Voie Communiste, No 44, May 1964, p 12, 13.
JPRS 25335

Which Maghreb, by Jean Michel, 5 pp.
FRENCH, per, La Voie Communiste, No 44, May 1964, pp 13.
JPRS 25335

Comparative Analysis of the Constitutions of the New African Nations, by H. Martins de Carvalho, 6 pp.
PORTUGUESE, per, O Comercio, 24 Jun 1964, pp 1, 4.
JPRS 25610

Sociological

Ministry of Works and Social Affairs Forms Vocational Training Centers, by Abu Feras Ali, 6 pp.
ARABIC, np, Al-Anba, 19 Jun 1964, p 3.
JPRS 25695

The Populations of the Inner Congo-Ubangi, by H. Burssens, 118 pp.
FRENCH, bk, Annales du Musee Royal du Congo, Brussels, Vol IV, pp 9-10; 13-21, 23-39; 41-48; 53-164; 172-174.
JPRS 25369

Africa
Sociological (Contd)

The Bira and Neighboring Tribes,
by H. Van Geluwe, 86 pp.
FRENCH, mono, Annales du Musee Royal du Congo Belge, London, 1958, pp 5-8, 12, 13, 17-19, 23-69, 73-111, 115-133, 137, 144-154.
JPRS 25695

Magic Among the Bakongo, 20 pp.
FRENCH, mono, Classe de Sciences Morales et Politiques, Memoires, Brussels, 1938, pp 345-348, 355-260, 366-372-381.
JPRS 25610

The Bali and the Related Tribes Ndaka, Mbo-Beke, Lika, Budu, Nyari, by H. van Geluwe, 81 pp.
FRENCH, bk, Ethnographic Survey of Africa, London, 1960, pp 27-60, 63-73, 77-85, 88-90, 93, 94, 99-105.
JPRS 25369

The Components of African Society, by Simon Kiba, 24 pp.
FRENCH, np, Afrique Nouvelle, 8-14 May 1964, pp 2, 16.
JPRS 25695

Witchcraft Among the Bambemba, by Ed. Labrecque, 7 pp.
FRENCH, per, Anthropos, Vol XXXIII, 1938, pp 260-264.
JPRS 25335

The Cult of the Dead Among the Balambo in the Congo, Leopoldville, by Thomas Kamalinda, 43 pp.
FRENCH, per, Anthropos -- Revue Internationale d'Ethnographie et Linguistiques, No 55, 1960, pp 145-173.
JPRS 25629

Notes on the Walendu or Bale, by Van den Eynde, 9 pp.
FRENCH, per, Congo, Vol IV, 1923, pp 520-530.
JPRS 25335

Notes on the Banya-Bungu Sorcers and Scers, by R. Roy, 8 pp.
FRENCH, per, Congo, Vol VI, 1924, 1925, pp 95-103.
JPRS 25335

Report of the Commission on Liberal Professions, by Rico, 6 pp.
FRENCH, np, Cooperation Hebdo, No 37, 15 May 1964, pp 1, 3.
JPRS 25335

Seasonal Holidays and Customs of the Mahoudia Ain-el-Hedid, by J. M. Richarte, 9 pp.
FRENCH, np, La Republique, 2-4 Jun 1964, p 2.
JPRS 25335

Railroad Workers' Congress, 8 pp.
FRENCH, np, Revolucion et Travail, No 44, 25 Jun 1964, p 8, 9.
JPRS 25693

The Superstitious Belief in Tribal Murder, 5 pp.
GERMAN, per, Arbeiter Zeitung, 28 May 1964, p 3.
JPRS 25610

Popular Angolan Associations, by Oscar Ribas, 9 pp.
PORTUGUESE, per, Mensario Administrativo, No 183-185, Oct-Dec 1962, pp 17-24.
JPRS 25610

Who are the Ambundu, by Jose Redinha, 16 pp.
PORTUGUESE, per, Mensario Administrativo, No 183-185, Oct-Dec 1962, pp 37-48.
JPRS 25610

MIDDLE EAST

Political

Arabs See Threat in Chinese Policy, by Amir Al-A'war, 6 pp.
ARABIC, np, Al-Akhbar, 28 Jun 1964, pp 1, 8.
JPRS 25658

Syrian Communist Party Chief Deplores Chinese Position, by Khalid Bakdash, 6 pp.
RUSSIAN, np, Pravda, 27 Jun 1964, p 3.
JPRS 25626

FAR EAST

Economic

The Prosperous Light Industrial Production in China, by Yang Ming-hsien, 6 pp.
CHINESE, per, Ching-chi Tao-pao, No 870, 25 May 1964, pp 13, 14.
JPRS 25704

Great Advance in China's Wool Textiles Industries, 5 pp.
CHINESE, per, Ching-chi Tao-pao, No 874, 22 Jun 1964, pp 13, 14.
JPRS 25804

How to Fix the Prices of all Types of Products Correctly, by Yu Lin, 19 pp.
CHINESE, per, Ching-chi Yen-chiu, No 5, 1964, pp 1-11.
JPRS 25454

On Production Prices in Socialist Economy, by Ho Chien-chang, Chang Ling, 17 pp.
CHINESE, per, Ching-chi Yen-chiu, No 5, 1964, pp 12-20.
JPRS 25454

The Method of Determining the Purchasing Power of Money, by Wang Chi-ych, 13 pp.
CHINESE, per, Ching-chi Yen-chiu, No 5, 1964, pp 21-27.
JPRS 25454

Relationship Between Fixed Asset Reproduction and Social Product Reproduction, by Liang Wen-ben, 12 pp.
CHINESE, per, Ching-chi Yen-chiu, No 5, 1964, pp 28-40.
JPRS 25454

On the True Nature of Floating Capital, by Hsu Yao-chun, 14 pp.
CHINESE, per, Ching-chi Yen-chiu, No 5, 1964, pp 41-48.
JPRS 25454

The Degeneration of the Yugoslav Economy Owned by the Whole People, by Shih Tung-hsiang, 29 pp.
CHINESE, per, Hung-ch'i, No 10, 23 May 1964.
JPRS 25624

Further Strengthen Labor Management in Industrial Enterprises, by Chao Wan-yu, 10 pp.
CHINESE, per, Lao-tung, No 1, 3 Jan 1962, pp 1-5.
JPRS 25536

**Far East
Economic (Contd)**

Implement Fixed Personnel and Fixed Norm on the Basis of Production Characteristics, by China Chemical Industrial Society, 5 pp. CHINESE, per, Lao-tung, No 1, 3 Jan 1962, pp 6-8.

JPRS 25536

The Importance of Labor Management in Shifts and Groups as Seen From the Comparison of Two Small Groups, 5 pp. CHINESE, per, Lao-tung, No 1, 3 Jan 1962, pp 9, 10.

JPRS 25536

Strengthen the Work of Fixed Personnel and Fixed Norm, Raise the Management Level of Enterprises, by Wang K'o, 13 pp. CHINESE, per, Lao-tung, No 5, 3 Mar 1962, pp 1-6.

JPRS 25536

The Work of Fixed Personnel and Fixed Norm in Experimental Points of Enterprises in Shanghai, 12 pp. CHINESE, per, Lao-tung, No 5, 3 Mar 1962, pp 7-11.

JPRS 25536

Strengthen Centralized and Unified Leadership in Labor Management Work, by Hsu Kang, 8 pp. CHINESE, per, Lao-tung, No 6, 18 Mar 1962, pp 1-5.

JPRS 25536

The Functions of Labor Norm and the Method of Enactment and Implementation, by Hsu Kung-min, 9 pp. CHINESE, per, Lao-tung, No 8, 18 Apr 1962, pp 1-5.

JPRS 25536

Enactment of Standards of Personnel Norm in Service Units Through Repeated Investigations, 5 pp. CHINESE, per, Lao-tung, No 14, 18 Aug 1962, pp 6, 7.

JPRS 25536

Stringently Control and Rationally Use Wage Fund, by Hsiang Kan-ch'eng, 8 pp. CHINESE, per, Lao-tung, No 14, 18 Aug 1962, pp 22-25.

JPRS 25536

Coordination of Five-Personnel, Grasping Four Phases, Watching Three Passes, 6 pp. CHINESE, per, Lao-tung, No 14, 18 Aug 1962, pp 25-27.

JPRS 25536

Earnestly Consummate Investigation and Research on the Standards of Fixed Personnel Among the Non-Directly Productive Staff in Industrial Enterprises, by Chang Te-min, 8 pp. CHINESE, per, Lao-tung, No 18, 18 Dec 1962, pp 15-18.

JPRS 25536

Struggle for the Thorough Implementation of the General Guidelines for the Development of the National Economy, 6 pp. CHINESE, per, Lao-tung, No 1, 18 Jan 1963, pp 1-4.

JPRS 25609

Proper Manpower Distribution and Balanced Economic Growth, by Hsu Kang, 9 pp. CHINESE, per, Lao-tung, No 3, 18 Mar 1963, pp 1-6.

JPRS 25609

**Far East
Economic (Contd)**

Problems of Manpower Reshuffling, by Yueh Kuang-chao, 7 pp. CHINESE, per, Lao-tung, No 3, 18 Mar 1963, pp 7-10.

JPRS 25609

Problems of Labor Quota Statistics, by Wang Ch'ih-wei, 12 pp. CHINESE, per, Lao-tung, No 3, 18 Mar 1963, pp 20-25.

JPRS 25609

Quota System Brings Into Full Play Latent Capacities and Potentials, 7 pp. CHINESE, per, Lao-tung, No 3, 18 Mar 1963, pp 26-28.

JPRS 25609

Problems of Management of Temporary Workers, by Yu Shu-lin, 5 pp. CHINESE, per, Lao-tung, No 10, 18 Oct 1964, pp 31-33.

JPRS 25609

Space Programs of Various Ministries and Agencies for Japanese Fiscal Year 1964, 18 pp. JAPANESE, rpt, 1960-1964, Encl No 1 to Desp A-1597, AmEmbassy, Tokyo.

Dept of State

On the Revision of Four Ministerial Ordinances on the Regulations and Laws of Radio (I), by Zenjiro, Ota, 12 pp. JAPANESE, pamphlet, Dempa Jihor, 1 Oct 63, pp 56-59. (Call No Not Given, Eng Tr)

Army Map Service

Revision of Various Regulations Concerning the Citizen's Radio, by Tsuneki, Shono, 13 pp. JAPANESE, pamphlet, Dempa Jihor, 1 Oct 63, pp 60-63.

(Call No Not Given, Eng Tr)

Army Map Service

The Republic's Budget for Socialist Construction and the Improvement on People's Life, by Yi Pyong-sok, 8 pp. KOREAN, per, Chaejong Kumyung, No 89, Apr 1964, pp 19-23.

JPRS 25320

Problems Concerning the Reinforcement of Book Keeping Regulations, by Mun Pyong-ham, 6 pp.

KOREAN, per, Chaejong Kumyung, No 89, Apr 1964, pp 33-35.

JPRS 25320

Improvement of the Management of Farmer's Markets, by Yi Hyo-hyok, 9 pp. KOREAN, per, Kulloja, No 6, 20 Mar 1964, pp 36-41.

JPRS 25320

Enterprise Managerial System and Cooperative Ownership, by Kim Kyun-hong, 9 pp. KOREAN, per, Kulloja, No 8, 20 Apr 1964, pp 21-27.

JPRS 25320

Let Us Improve the Marketing Operations in Accordance With the Present Needs, by Han Tae-yong, 10 pp. KOREAN, per, Kulloja, No 245, Apr 1964, pp 11-18.

JPRS 25320

Savings and Consumption Among Cooperative Farms in Our Country, by Yi Yong-tok, Chon Tae-yong, 9 pp. KOREAN, per, Kulloja, No 245, Apr 1964, pp 27-33.

JPRS 25320

Far East
Economic (Contd)

Repealing the Farm Excise Tax and Its Significance, by Kim Ch'un-chom, 6 pp.
KOREAN, per, Kulloja, No 245, Apr 1964, pp 34-38.
JPRS 25320

Intensifying the Development of Socialist Farm Management in Our Country, by Kim Ch'ol-yong, 8 pp.
KOREAN, per, Kulloja, No 246, Apr 1964, pp 28-34.
JPRS 25320

The Newly Revised Banking System, by Kang Il-kon, 6 pp.
KOREAN, np, Minju Choson, 18 Apr 1964, p 2.
JPRS 25320

The Newly Revised Banking System, by Kang Il-kon, 6 pp.
KOREAN, np, Minju Choson, 19 Apr 1964, p 2.
JPRS 25320

The Newly Revised Banking System, by Kang Il-kon, 6 pp.
KOREAN, np, Minju Choson, 23 Apr 1964, p 2.
JPRS 25320

The 1964 National Budget, 6 pp.
KOREAN, np, Minju Choson, 8 May 1964, p 2.
JPRS 25320

Strengthening the People's Economic Planning, by Pak P'ung-sik, 6 pp.
KOREAN, np, Nodong Sinmun, 27 Apr 1964, p 2.
JPRS 25320

The Monthly Work Directive System in the County Cooperative Farms, by Kang Song-mo, 6 pp.
KOREAN, np, Nodong Sinmun, 7 May 1964, p 6.
JPRS 25320

A New Monetary Wage System at Agricultural Artels, by S. Gombodoo, 6 pp.
MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asuudal, No 6, Dec 1963, pp 8-12.
JPRS 25657

Wage Funds of Agricultural Artels and Rules for Their Expenditure, by Yo Dambadarjaa, 5 pp.
MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asuudal, No 6, Dec 1963, pp 13-17.
JPRS 25657

Party Organizations at Agricultural Artels, by B. Lodoisuren, 7 pp.
MONGOLIAN, per, Namyn Am'dral, No 2, 1964, pp 29-35.
JPRS 25657

Study the Advanced Agricultural Production Cooperatives, by Nguyen Chuong, 22 pp.
VIETNAMESE, per, Hoc Tap, May 1964, pp 52-58.
JPRS 25379

The Production of Goods, the Law of Values, and Price Policy, by Nguyen Thuong Hoa, 9 pp.
VIETNAMESE, per, Hoc Tap, May 1964, pp 62-67.
JPRS 25379

Comments on Our Production Economy and the Laws of Value and Price, by Le Cong Thuong, 15 pp.
VIETNAMESE, per, Hoc Tap, May 1964, pp 67-75.
JPRS 25379

Far East
Economic (Contd)

Some Ideas on the Question of Overall Prices in North Vietnam, by Ho Lich, 13 pp.
VIETNAMESE, per, Hoc Tap, May 1964, pp 76-79.
JPRS 25379

Improving Cooperative Management and Technology to Increase Substantially Agricultural Output, by Bui Huy Dap, 19 pp.
VIETNAMESE, per, Hoc Tap, Jun 1964, pp 44-48.
JPRS 25327

Problem of Production of Commodities, Regulations on Values, and Price Policy, by Le Huu Chinh, 17 pp.
VIETNAMESE, per, Hoc Tap, No 6, 1964, pp 55-60.
JPRS 25327

About the Law of Value and Price Policy in the Economy of North Vietnam, by Le Hoang, 7 pp.
VIETNAMESE, per, Hoc Tap, No 6, 1964, pp 63-67.
JPRS 25327

Goods Production, Value Rules, and Price Policies, by Doan Trong Tuyen, 21 pp.
VIETNAMESE, per, Hoc Tap, Jun 1964, pp 67-79.
JPRS 25327

Good Results in Hanoi and Hai-Phong of the Each Does the Work of Two Campaign, 6 pp.
VIETNAMESE, np, Nhan Dan, 2 Jun 1964, p 3.
JPRS 25612

More Labor on a Unit of Land, by Nguyen Van Ngan, 6 pp.
VIETNAMESE, np, Nhan Dan, 12 Jun 1964, p 2.
JPRS 25495

Quality Improvement, by Ho Van Nghia, 5 pp.
VIETNAMESE, np, Nhan Dan, 24 Jun 1964, p 3.
JPRS 25612

Rural Transportation and Communications, by Phan Trong Tue, 9 pp.
VIETNAMESE, np, Nhan Dan, 25 Jun 1964, p 3.
JPRS 25671

Utilize Labor to Increase Quantity of Agricultural Products Sold to the State, by Ngoc Hung, 6 pp.
VIETNAMESE, np, Nhan Dan, 5 Jul 1964, p 2.
JPRS 25625

An Endless Source of Development, by Anh Vu, 8 pp.
VIETNAMESE, np, Nhan Dan, 5 Jul 1964, p 3.
JPRS 25668

Political

Comments on "Why Is It That Red Political Power Can Exist in China", by Liu Nan-lei, 11 pp.
CHINESE, per, Cheng-fa Yen-chiu, No 4, 1963, pp 23-27.
JPRS 25647

Our Country's Present Problems of Nationalities and Class Struggle, by Liu Ch'un, 17 pp.
CHINESE, per, Hung-ch'i, No 12, 1964, pp 16-25.
JPRS 25510

Far East
Political

Chinese Actions Weaken World Socialist System, by Csaba Kiss, 7 pp.
HUNGARIAN, per, Tarsadalmi, Vol XIX, No 6, 1964, pp 1-8.
JPRS 25355

Regional Key Positions in the Socialist Farm Construction, by Kim Yang-son, 9 pp.
KOREAN, per, Kulloja, No 245, Apr 1964, pp 19-26.
JPRS 25319

Must Consolidate Experience and Correct Shortcomings, by B. Baljinnyam, 5 pp.
MONGOLIAN, per, Namyn Am'dral, No 3, 1964, pp 14-17.
JPRS 25321

Chinese Cannot Lock CPSU Out of Africa and Asia, by V. Marveyev, 6 pp.
RUSSIAN, np, Izvestiya, 7 Jun 1964, p 4.
JPRS 25355

The Lesson of Dien-Bien-Phu, by Hoang-van-Thai, 16 pp.
VIETNAMESE, per, Hoc Tap, May 1964, pp 14-22.
JPRS 25379

Dien Bien Phu and Our Party's Leadership, by Le Quang Dao, 21 pp.
VIETNAMESE, per, Hoc Tap, May 1964, pp 23-36.
JPRS 25379

Failure Ahead for New Lackey Government in the South, by Nguyen Ninh, 13 pp.
VIETNAMESE, per, Hoc Tap, May 1964, pp 44-51.
JPRS 25379

Maintain International Unity and Oppose Every Divisive Scheme, 11 pp.
VIETNAMESE, per, Hoc Tap, No 6, 1964, pp 1-8.
JPRS 25327

Firmly Grasp Party Line, Overcome Wrong Thinking, and Fulfill State Plan, by Nhuyen Duy Trinh, 23 pp.
VIETNAMESE, per, Hoc Tap, No 6, 1964, pp 9-20.
JPRS 25327

The Laotian Revolution, a Vivid Example of National Liberation Struggle, by Hong Chuong, 18 pp.
VIETNAMESE, per, Hoc Tap, Jun 1964, pp 21-33.
JPRS 25327

Governmental Report on the Patriotic Emulative Movement, by Le Thanh Nghi, 21 pp.
VIETNAMESE, np, Nhan Dan, 30 Jun 1964, p 2.
JPRS 25625

The Credentials of the National Assembly Representatives Are Accepted, 8 pp.
VIETNAMESE, np, Nhan Dan, 2 Jul 1964, pp 1, 4.
JPRS 25625

Sharp Internal Conflict Among U.S. Capitalists in Presidential Electoral Campaign, by Le Binh, 7 pp.
VIETNAMESE, np, Nhan Dan, 6 Jul 1964, p 3.
JPRS 25625

Progress at the Political Junior College at Task of Feeding Troops, by Bui Duc Tam, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 16 Jun 1964, p 2.
JPRS 25007

Military

Research and Development, by Samiadi, 12 pp.
INDONESIAN, per, Armada, No 9, 1963, ALUSNA, Djakarta.
Navy 5845015164
(DIA)

Geographic

The Great Yellow River, by Wang Wei-p'ing, Hu Ying-mei, 120 pp.
CHINESE, bk, Wei-ta Ti Huang-ho, 1955, pp 1-94.
(Call No GB 1338 H9 W24, Eng Tr)
Army Map Service

The Geomorphologic Characteristics and Development Problems of the Li-Tzu-ku Marsh Land in Hopei Province, by Liu Tsun-hai, Yuan Shu-lan, et al, 9 pp.
CHINESE, per, Ti-li, No 4, 29 Jul 1963, pp 157-159.
JPRS 24799

Outline of Territorial Regions. (NY-9306)
KOREAN, bk, Ch'oesin Kukt'o Kuyok Ch'ongnam, Seoul, Chapters I, II, VI, VII, IX, Apr 1963, pp 3-5; 15-220, 221-233; 352-454; 460-469.
*JPRS

Sociological

An Approach to the Nature and Characteristics of Our Struggle Against Crimes in the Period of Transition in Our Country, by Lu Feng, 11 pp.
CHINESE, per, Cheng-fa Yen-chiu, No 4, 1963, pp 17-22.
JPRS 25647

Introduction to the Lectures on the Basic Knowledge of Jurisprudence, by Lu Tun, 7 pp.
CHINESE, per, Cheng-fa Yen-chiu, No 4, 1963, pp 51-53.
JPRS 25647

Birth Control in China, by Hsu Tsung-hsiu, 5 pp.
CHINESE, per, Chung-kuo Fu-nu, No 5, 1 May 1964, pp 30, 31.
JPRS 25580

More Extensively and Penetratingly Unfold the Compare, Learn, Catch Up, and Help Movement, Several Points of Experience Concerning the Unfolding of the Movement on the Industrial Front in East China, by Han Che-yi, 15 pp.
CHINESE, per, Hung-ch'i, No 10, 23 May 1964.
JPRS 25624

More on the Question of the Criterion of Practice in the Study of Natural Sciences, by Ho Tso-hsiu, 16 pp.
CHINESE, per, Hung-ch'i, No 10, 23 May 1964.
JPRS 25624

Practice is the Only Objective Criterion by Which to Verify Truth, by Ho Tso-hsiu, Tu Lei, et al, 8 pp.
CHINESE, per, Hung-ch'i, No 10, 23 May 1964.
JPRS 25624

**Far East
Sociological (Contd)**

The Situation on the Discussion of the Question of the Criterion of Practice, by Chan P'eng, 5 pp.
CHINESE, per, Hung-ch'i, No 10, 23 May 1964.
JPRS 25624

The Debate of the "Hypothesis of Forward Inversion" of Activity and Stability and the "Hypothesis of Cyclic Multi Alteration" and the Dialectic, by Chang Tseng-yu, 10 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 416-420.
JPRS 25741

Study of the Saline Soil Improvement Plan of the North China Plain, by Wang An-ch'iu, 13 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 426-431.
JPRS 25741

Study of Dual Functionality of Electronic Acidic Catalysts; V. The Effects of Different Metallic Components, by Hsiao Kuang-yen, T'ang Huan-i, 12 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 461-464.
JPRS 25741

Wu-La-Wu-Su, Sinkiang, by Wu Ying-t'ang, Chang Te-hua, 5 pp.
CHINESE, per, Min-tsu Tuan-chieh, No 5, 1964, pp 22-24.
JPRS 25580

Chinese Language, 10 pp.
CHINESE, per, Wen-tzu Kai-ko, No 6, 1964, pp 20, 21.
JPRS 25580

Ideological Revolution in Rural Communities, by Yi Yang-sun, 12 pp.
KOREAN, per, Kulloja, No 6, 20 Mar 1964, pp 2-9.
JPRS 25319

Cultural Revolution in Rural Communities, by Kim Song-ki, 9 pp.
KOREAN, per, Kulloja, No 6, 20 May 1964, pp 10-15.
JPRS 25319

State Assistance to Socialistic Rural Communities, by Park Byong-muk, 10 pp.
KOREAN, per, Kulloja, No 6, 20 Mar 1964, pp 16-22.
JPRS 25319

Problems of Rural Communities and the Question of Balance Between Rural and Urban Areas, by Yun Pyon-song, 11 pp.
KOREAN, per, Kulloja, No 6, 20 Mar 1964, pp 23-30.
JPRS 25319

30th Anniversary of the Korean People's Revolutionary Army, by Kim Ul-chon, 8 pp.
KOREAN, per, Kulloja, No 6, 20 Mar 1964, pp 31-35.
JPRS 25319

Let Us Strengthen the Struggle to Raise the General Standard of Party Members and Workers to a New Plateau, by Pak Ki-son, 72 pp.
KOREAN, per, Kulloja, No 245, Apr 1964, pp 2-10.
JPRS 25319

The Mission and Role of Kun as Regional Unit and Base in Socialist and Communist Construction, by Hyon Tong-kwan, 10 pp.
KOREAN, np, Minju Choson, 15 Apr 1964, pp 2, 3.
JPRS 25319

Balanced Improvement of the Livelihood of the Workers and Peasants, by Kim Chong-il, 11 pp.
KOREAN, np, Nodong Sinmun, 9 May 1964, pp 2, 3.
JPRS 25319

**Far East
Sociological (Contd)**

Defects in the Court Trial Work Must be Eliminated, by H. Damdin, 6 pp.
MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asuudal, No 6, Dec 1963, pp 35-39.
JPRS 25657

Inclusion of Public Prosecutors and Defenders at Trials, by G. Sobd, 5 pp.
MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asuudal, No 6, Dec 1963, pp 40-44.
JPRS 25657

Writers' and Creators' Copyrights in the Civil Code of the Mongolian People's Republic, by D. Dzundui, 5 pp.
MONGOLIAN, per, Ediyn Dzasag, Erhiyn Asuudal, No 6, Dec 1963, pp 48-52.
JPRS 25657

On Further Measures to Improve the State Social Insurance, 16 pp.
MONGOLIAN, np, Hodolmor, 9 May 1964, pp 1-3.
JPRS 25735

Teaching of History Must Be Changed and Improved, 5 pp.
MONGOLIAN, per, Surgan Humuujuulegch, No 2, Apr 1964, pp 7-11.
JPRS 25735

An Appeal by the Board of Directors of the Central Handicraft Cooperative Federation, 5 pp.
VIETNAMESE, np, Doc Lap, No 675, 5 Jun 1964, pp 2, 3, 11.
JPRS 25607

Some Ideas on the Tasks of Care and Education of Young People and Children, by Ho Truc, 17 pp.
VIETNAMESE, per, Hoc Tap, No 6, 1964, pp 49-54.
JPRS 25327

Education in the Mountain Areas, by Hoang Ngoc Di, 5 pp.
VIETNAMESE, np, Nhan Dan, 24 Jun 1964, p 3.
JPRS 25671

Socialism Told us to do so, by Hoai Viet, 6 pp.
VIETNAMESE, np, Nhan Dan, 6 Jul 1964, p 2.
JPRS 25607

The People's Self-Defense Army of Vinh Linh is Ready, by Tran than Dat, 6 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 13 Jun 1964, p 2.
JPRS 25607

This Year's Army Art Exhibition, by Xuan Thinh, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 13 Jun 1964, p 3.
JPRS 25607

LATIN AMERICA

Economic

Promulgation of Brazilian-Rumanian Trade, Payments, and Economic Agreement of 1961, 9 pp.
PORTUGUESE, rpt, Decree No 52,466 of September 12, 1963, Encl No 1 to Desp A-30, AmEmbassy, Rio de Janeiro.
Dept of State

Establishing Norms Regulating Article 37 of Law No 3244 of 14 August 1957, Customs Tariff Law, and Establishing oOther Provisions, 7 pp.
PORTUGUESE, per, Diario Oficial, 16 Jun 1964, Encl No 1 to Desp A-10, AmEmbassy, Rio de Janeiro.
Dept of State

Political

Organic Law of the Armed Forces, No 168 of 6 March 1964, 19 pp.
SPANISH, per, Gaceta Oficial, No 8840, 11 Mar 1964, ALUSNA, Santo Domingo, Dominican Republic.
Navy 5827004764
(DIA)

Sociological

The Problems of Building Socialism in Cuba, by Mikolaj Obolenski, 10 pp.
POLISH, per, Gospodarka Planowa, No 6, 1964, pp 55-59.
JPRS 25744

Report on Minas De Frio, 6 pp.
SPANISH, np, Revolucion, 8 Jun 1964, pp 8-10.
JPRS 25385

WORLD WIDE

Economic

The German Democratic Republic in the System of International Socialist Division of Labor, by N. P. Dracheva, N. N. Popov, 31 pp.
RUSSIAN, bk, GDR v Sisteme Mezhdunarodnogo Sotsialisticheskogo Razdeleniya Truda, 1963, pp 40-67; 191-196; 230-237.
JPRS 25760

World Wide Political

Komsomol Supports CPSU Stand, 15 pp.
RUSSIAN, np, Komsomol'skaya Pravda, 30 May 1964, p 2.
JPRS 25355

Sociological

The Political and Ideological Adaptation of the Catholic Church Second Vatican Council and the Problem of Aggiornamento, by L. N. Velikovich, 18 pp.
RUSSIAN, per, Voprosy Filosofii, No 4, 1964, pp 134-144.
JPRS 25514

SCIENTIFIC

Aerospace

Works on Rocket Technology, by K. E. Tsiolkovskiy, RUSSIAN, bk, Trudy po Raketnoy Tekhnike, Moscow, 1947, 368 pp.
*NASA TT F-243

Five Years of Soviet Space Research, by M. B. Kroshkin, V. G. Samarin, 27 pp.
RUSSIAN, per, Geofiz Byul, No 13, 1963, pp80-93.
JPRS 25705

Rockets in Orbit, by B. Trofimov, 7 pp.
RUSSIAN, np, Krasnaya Zvezda, 15 April 1964, p 1.
9693227
FTD-TT-64-536

Flying Wagons, by Jerzy Domanski, 7 pp.
POLISH, per, Zolnierz Polski, No 8 (821), Feb 23, 1964, p 13. 9693231
FTD-TT-64-464

Agriculture

Principles of Field-Protective Frestation, by B. I. Logginov, 302 pp.
RUSSIAN, bk, Osnovy Polezashchitnogo Lesorazvedeniya, Moscow, 1961.
OTS 64-11010
PL-480

Use of New Kinds of Fertilizers of Petroleum Origin, by D. M. Guseynov, 65 pp.
RUSSIAN, bk, Primeneniye Novykh Vidov Udobreniy Neftyanogo Proiskhozhdeniya, Moscow, 1961, pp 3-64.
JPRS 25348

Comparative Effectiveness of Nitrophoska and Mixtures of Ordinary Fertilizers under Localized Application To Corn and Millet, by V. S. Torin.
RUSSIAN, per, Dok Sel'skikh Ak Timiryazevskaya, Vol LXIV, 1961, pp 15-18. 9223069
USDA Tr A-1448

Scientific
Agriculture (Contd)

Effective Use of Fertilizers and Further Intensification of Agriculture, by N. N. Baranov, 11 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 2-6.
JPRS 25528

Urea-Formaldehyde Fertilizers, by F. V. Turchin, V. I. Sokolova, et al, 12 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 6-10.
JPRS 25528

Fertilizing Under Winter Rye in Occupied Fallows, by M. Ye. Pronin, M. I. Shatalova, 10 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 10-13.
JPRS 25528

Significance of the Forms of Mineral Fertilizers in the Case of Introductions in Rows and in the Nutrition of Sugar Beets, by I. G. Rozhdesvenskiy, 8 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 13-16.
JPRS 25528

Assimilation of Nutrient Substances by Soil and of Fertilizers by Plants of a Legume-Grass Pasture, by S. V. Shischenko, 8 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 16-19.
JPRS 25528

Influence of Additions of Synthetic Resins on the Physical Properties of Fertilizer Mixtures, by N. V. Babenko, 6 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 19-21.
JPRS 25528

Influence of the Conditions of Storage on the Variation of the Toxicity of Phosphamide, by A. S. Sedykh, T. N. Pan'shina, et al, 8 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 22-24.
JPRS 25528

Activity and Localization of Alkaline Phosphatase and Cholinesterase in Insects, by S. A. Roslavtseva, P. V. Popov, 5 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 25-26.
JPRS 25528

Photochemical Oxidation of Petroleum Products Used as Insecticides, by S. F. Bezuglyy, I. G. Sarishvili, et al, 7 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 26-29.
JPRS 25528

Moist Disinfestation of Warehouses With Organophosphorus Preparations, by G. M. Mardzhanyan, A. A. Karyan, et al, 6 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 29-31.
JPRS 25528

Influence of Various Disinfectants on the Energy of Sprouting, Technical and Soil-Germinating Capacity of Seeds of Siberian Acacia, by A. A. Prisyazhnik, 5 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 31-33.
JPRS 25528

Study of the Herbicidal Activity and Selectivity of Carbine, by V. A. Voytekova, M. I. Gagarina, et al, 8 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 35-37.
JPRS 25528

Scientific
Agriculture (Contd)

Duration of the Action of Phenylidimethylurea Derivatives and Their Effectiveness as a Function of the Type of Soil, by L. I. Korolev, V. A. Voytekova, et al, 8 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 37-41.
JPRS 25528

Destruction of Bush Overgrowth by Chemical Treatment During the Period Before Opening of the Leaves, by T. V. Zosimovskaya, P. A. Samgin, 7 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 41-43.
JPRS 25528

Effectiveness of Carbine for Combatting Wild Oats, by L. S. Roktanen, V. P. Tomilov, 5 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 43-45.
JPRS 25528

Use of Herbicides in Tselinyy Kray, by P. V. Shin, 5 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 45-47.
JPRS 25528

The Use of Herbicides in Latvian SSR, by A. D. Trusova, 8 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 2, 1964, pp 47-50.
JPRS 25528

Late Fertilization of Winter Wheat With Urca as a Method of Improving Grain Quality, by M. Ye. Promin, V. G. Mineyev, 8 pp.
RUSSIAN, per, Khim v Sel'skom Khoz, No 5, 1964, pp 8-11.
JPRS 25688

Problems Pertaining to Current Assets in the Sovkhoz, by V. N. Semenov, 7 pp.
RUSSIAN, per, Uchet i Finansy v Kolkhozakh i Sovkhozakh, No 4, 1964, pp 30-33.
JPRS 25231

New Strides in Agricultural Development, 14 pp.
RUSSIAN, per, Voprosy Ekonomiki, No 2, 1964, pp 3-13.
JPRS 25231

Intensification of Agriculture Discussed, by M. Terent'yev, 15 pp.
RUSSIAN, per, Voprosy Ekon., No 3, 1964, pp 3-14.
JPRS 25231

Fertilizing System Based on Agrochemical Cartography of Soils, by A. L. Nakhmanovich, A. T. Ponomareva.
RUSSIAN, per, Zemledelie, Vol XXV, No 9, 1963, pp 42-46. 9223068
USDA Tr A-1447

The Protection of Crops From Diseases and Pests Should be a Concern of All Agricultural Workers, by Maser Baci, 6 pp.
ALBANIAN, np, Bashkimi, 26 Jun 1964, pp 2, 3.
JPRS 25684

Measures Against Soil Erosion, 5 pp.
ALBANIAN, np, Zeri i Popullit, 18 Jun 1964, pp 2, 3.
JPRS 25684

Important Duties for Animal Husbandry Workers, 6 pp.
ALBANIAN, np, Zeri i Popullit, 2 Jul 1964, pp 1, 2.
JPRS 25684

Reconstruction and Progress of Agriculture, 20 pp.
BULGARIAN, per, Naruchnik na Agitatora, No 10-13, Mar 1964, pp 49-71.
JPRS 25362

Scientific
Agriculture (Contd)

- The Theory of Growth Regulators in Plants, by Jen Hai-ch'ou, 8 pp.
CHINESE, per, Sheng-wu-hsueh T'ung-pao, No 2, 1964, pp 9-13.
JPRS 25741
- Principles and Methods of Chemical Weed Removal in Rice Paddies, by Hsi Hui-ta, 8 pp.
CHINESE, per, Sheng-wu-hsueh T'ung-pao, No 2, 1964, pp 14-16.
JPRS 25741
- Land the Foundation of Agricultural Production Land the Nourisher, by Jiri Foltyn, 13 pp.
CZECH, per, Nova Mysl, No 5, 1964, pp 597-606.
JPRS 25218
- The More Important Prices Applicable in Agriculture, 70 pp.
HUNGARIAN, per, Termelozovetkezetek Tanacsadoja, No 19, 6 May 1964, pp 1-16.
JPRS 25380
- Vertical Drainage, by Franciszek Stryjewski, 22 pp.
POLISH, per, Gospodarka Wodna, Vol XVIII, No 9, 1958, pp 390-396.
OTS 61-31300
PL-480
- Changes in Glycoalkaloid Contents in Leaves of Cultivated and Wild Potatoes and Their Hybrids During Growth and Their Influence on the Colorado Potato Beetle, Part I, by Tadeusz Pierzchalski, E. Werner, 18 pp.
POLISH, per, Hodowla Roslin, Aklimatyzacja i Nasiennictwo, Vol II, No 2, 1958, pp 157-180.
OTS 61-31267
PL-480
- Causes of Poor Fructification of Buckwheat. Part I. The Problem of Self-Pollination and Short- and Long-Pistil Flowers, by S. Lewicki, B. Ruskowska, 12 pp.
polish, per, Hodowla Roslin, Aklimatyzacja i Nasiennictwo, Vol II, No 5, 1958, pp 567-577.
OTS 61-11395
PL-480
- Investigations Into the Rust Resistance of Different Flax Varieties, by H. Drzyzgalowska, 23 pp.
POLISH, per, Prace Instytutu Przemyslu Wlokien Lykowych, No 6, 1958, pp 27-43.
OTS 61-11392
PL-480
- Investigations and Results in 1957-1959, 11 pp.
POLISH, per, Prace Instytutu Przemyslu Wlokien Lykowych, No 9, 1962, pp 11-20.
OTS 61-11392
PL-480
- A Comparative DP-Determination of Chemical Pulps on the Basis of Viscosity Measurements in Different Solvents, by J. Gelo, B. Wasiak, 18 pp.
POLISH, per, Przeglad Papierniczy, No 11-12, 1959.
OTS 61-11379
PL-480
- Total, Active and Exchangeable Manganese in Soils of Lodz Province, by A. Musierowicz, K. Czarnowska, 34 pp.
POLISH, per, Roczniki Gleboznawcze, Vol IX, 1960, pp 137-141.
OTS 61-31325
PL-480
- Changes in Carotene Content of Fodder Plants in the Course of Their Vegetative Period, by Z. Wierzchowski, 40 pp.
POLISH, per, Roczniki Nauk Rolniczych, Vol LXXI, No 4, 1957, pp 565-611.
OTS 60-21575
PL-480

Scientific
Agriculture (Contd)

- Effect of Environmental Moisture on the Vitality of Seeds of Certain Species of Vegetables, by Marian Litynski, 52 pp.
POLISH, per, Roczniki Nauk Rolniczych, Vol LXXVI, Ser A, No 2, 1957, pp 217-290.
OTS 61-31255
PL-480
- Manganese in the Major Soils of Lodz Province, by A. Musierowicz, K. Czarnowska, 27 pp.
POLISH, per, Roczniki Nauk Rolniczych, Vol LXXXIV, Ser A, No 4, 1961, pp 563-592.
OTS 61-31325
PL-480
- The Influence of Soil Particles Displacement Due to Cultivator on Soil Erosion in Mountainous Areas, by M. Drozd, Z. Martini, 7 pp.
POLISH, per, Zeszyty Naukowe Wysszej Szkoły Rolniczej we Wroclawiu, No 17, 1958, pp 23-33.
OTS 61-31256
PL-480
- An Attempt to Estimate the Carotene Production of Meadows, by Z. Wierzchowski, 5 pp.
POLISH, per, Zeszyty Problemowe Postepow Nauk Rolniczych, No 20, 1959, pp 101-106.
OTS 60-21575
PL-480
- Scientific Research in Animal Husbandry and Poultry Raising, by Vasile Herdea, 9 pp.
RUMANIAN, per, Lupta de Clasa, No 4, 1964, pp 69-83.
JPRS 25215
- The Path to the Mechanization of Agriculture in the North, by Tran Duc, 26 pp.
VIETNAMESE, per, Hoc Tap, No 6, 1964, pp 34-43.
JPRS 25327

Biological & Medical Sciences

- An Outline of the Clinical Physiology of the Circulation, by V. V. Parin, F. Z. Meyerson.
RUSSIAN, bk.
NASA (OTS)
- What is Bionics?, by Petr Timofeyevich Astashenkov, 78 pp.
RUSSIAN, bk, Chto Takoye Bionika, Moscow, 1963, pp 1-88.
JPRS 25494
- Dynamocardiography, by Ye. B. Babitskiy, V. L. Karpman, 140 pp.
RUSSIAN, bk, Dinamokardiografiya, Moscow, 1963, 168 pp. 9223195
NASA TT F-205
- Geobotanical Mapping, by V. B. Sochava, T. I. Isachenko, 116 pp.
RUSSIAN, bk, Geobotanicheskoye Kartografirovaniye, Moscow-Leningrad, 1963, pp 3-72.
JPRS 25347
- Studies in Hypothermia and Anabiosis, by Ye. V. Maystrakh, 22 pp.
RUSSIAN, bk, Gipotermiya i Anabioz, Moscow, 1964, pp 3-23; 285-288.
JPRS 25650

**Scientific
Biological and Medical Sciences (Contd)**

Fisheries Research in Russia, by P. G. Borisov, 187 pp.
RUSSIAN, bk, Iz Istori Nauchno-Promyslovyykh
Ikhtologicheskikh Issledovaniy na Morskikh i
Prestnykh Vodoemakh SSSR, Moscow, 1960.
OTS 63-11121
PL-480

Protection of Grain Products From Radioactive,
Chemical and Bacterial Substances Discussed,
by V. L. Averbuch, I. Z. Berlin, 14 pp.
RUSSIAN, bk, Kak Zashchitit' K'lebo Produkty ot
Radioaktivnykh, Khimicheskikh Veshchestv i
Bakterial'nykh Sredstv, Moscow, 1963, pp 26-40.
JPRS 25250

Protecting Food and Water Against Chemical
Biological Radiological Attack, by V. Ya. Kovalenko,
59 pp.
RUSSIAN, bk, Kak Zashchitit' Vodu i Prodvot'stviye
ot Radioaktivnykh, Otravlyayushchikh Veshchestv
i Bakterial'nykh Sredstv, 1963, Medgiz, Moscow,
3-64.
JPRS 25214

Loess of Northern China, 134 pp.
RUSSIAN, bk, Lessy Severnogo Kitaya, Moscow, 1959.
OTS 64-11074
PL-480

A New Method of Increasing Livestock Productivity
(Castration With Hormonal Integrity), by
A. A. Bayburtayan, 104 pp.
RUSSIAN, bk, Novyi Metod Povysheniya Produktivnosti
Skota, Moscow, 1961.
OTS 64-11009
PL-480

Oceanological Principles as Related to the Fishery
Productivity of the Seas, by G. K. Izhevskiy, 186 pp.
RUSSIAN, bk, Okeanologicheskie Osnovy Formirovaniya
Promyslovoy Produktivnosti Morei, Moscow, 1961.
OTS 63-11120
PL-480

Principal Remedies of Chinese Medicine, by
F. I. Ibragimov, V. S. Ibragimova, 415 pp.
RUSSIAN, bk, Osnovnyye Lekarstvennyye Sredstva
Kitayskoy Meditsiny, 1960, pp 5-411. 9693315
FTD-TT-63-815

Evaluation of Effectiveness of Measures for
Prevention of Communicable Diseases, by
B. S. Bessmertnyy, L. B. Kheyfets. (NY-9291)
RUSSIAN, bk, Otsenka Effektivnosti Meropriyatiy
po Profilaktike Infektsionnykh Bolezney, 1963,
208 pp.
*JPRS

Instruments and Apparatuses for Biological Research
and Medical Diagnosis, Progressive Scientific-Technical
and Productive Experience, 47 pp.
RUSSIAN, booklet, Priory i Apparatura dlya Biologich-
eskikh Issledovaniy i Meditsinskoy Diagnostiki,
Peredovoy Nauchno-Tekhnicheskii i Proizvodstvennyy
Opyt, Moscow, No 7, 1962, pp 1-28.
JPRS 25587

M-44 Live Vaccine Against Q-Fever, by
V. A. Genig, 13 pp.
RUSSIAN, bk, Problems of Infectious Pathology
and Immunology, 1963, pp 165-176.
NIH 6-10-64

Radiation Hygiene, by S. M. Gorodinskiy,
G. M. Parkhomenko, et al, 40 pp.
RUSSIAN, bk, Radiatsionnaya Gigiyena, Moscow,
1962, pp 109-232.
JPRS 25115

**Scientific
Biological and Medical Sciences (Contd)**

Trematodes of Animals and Man, by K. I. Skryabin,
444 pp.
RUSSIAN, bk, Trematody Zhivotnykh i Cheloveka,
Vol XVII, 1960.
OTS 63-11128
PL-480

Certain Concepts in the Study of Fertilizers,
by S. A. Kudrin.
RUSSIAN, per, Agrobiolog, Vol CXXXVII, No 5,
Sep, Oct 1962, pp 756-768. 9223067
USDA Tr A-1446
Ekmolin Salt of Phenoxymethylpenicillin,
by E. I. Bishara, Ye. N. Lazareva, 8 pp.
RUSSIAN, per, Antibiotiki, Vol IX, No 5, 1964,
pp 403-408.
JPRS 25686

Symposium on Aerosols, by S. I. Eydel'steyn, 5 pp.
RUSSIAN, per, Antibiotiki, Vol IX, No 5, 1964,
pp 472-475.
JPRS 25686

Certain Problems of Bone Marrow Transplantation
in Radiation Affections, by K. K. Zaytseva, 21 pp.
RUSSIAN, per, Arkhiv Patolog, Vol XXVI, No 3,
1964, pp 3-15.
JPRS 25350

Current Data on the Structure, Properties and
Pathological Changes of Elastic Structures,
by L. D. Zherebtsov, 22 pp.
RUSSIAN, per, Arkhiv Patolog, Vol XXVI,
No 4, 1964, pp 3-17.
JPRS 25252

The State of Hemopoietic Tissue in Acute Radiation
Sickness Under Conditions of Bone Marrow Trans-
plantation, by N. S. Rozanova, V. N. Malanina,
et al, 15 pp.
RUSSIAN, per, Arkhiv Patolog, Vol XXVI, No 4,
1964, pp 32-40.
JPRS 25251

The Thermodynamics of Photosynthesis,
by L. H. Bell, 10 pp.
RUSSIAN, per, Biofiz, Vol IX, No 3, 1964, pp 293-298.
JPRS 25733

Determination of the Probability of Singlet-Singlet
and Singlet-Triplet Transitions in Molecules Possessing
a Conjugate System of π -Electrons, by Yu. V. Morozov,
A. I. Kuklin, 11 pp.
RUSSIAN, per, Biofiz, Vol IX, No 3, 1964, pp 299-305.
JPRS 25733

The Absence of Nuclear Control of the Increased
Cathepsin Activity in Early Embryonic Development,
by A. A. Neyfakh, Ye. R. Davidov, 15 pp.
RUSSIAN, per, Biokhim, Vol XXIX, No 2,
Mar, Apr 1964, pp 273-282.
JPRS 25228

Investigation of an Intermediate Compound of a
Newly Synthesized Polypeptide With Ribonucleic
Acid, by S. Ye. Bresler, N. N. Vasil'yeva, et al,
18 pp.
RUSSIAN, per, Biokhim, Vol XXIX, No 2, Mar, Apr
1964, pp 353-362.
JPRS 25228

Informational RNA'S of Differentiating Animal Cells,
by N. V. Belitsina, M. A. Ayt Khozhin, 19 pp.
RUSSIAN, per, Biokhim, Vol XXIX, No 2,
Mar, Apr 1964, pp 363-374.
JPRS 25228

**Scientific
Biological and Medical Sciences (Contd)**

The Biometrical Method in Botanical Taxonomy,
by V. M. Shmidt, 21 pp.
RUSSIAN, per, Botan Zhur, Vol XLIX, No 1,
1964, pp 85-93.
JPRS 25353

Bioelectric Activity of the Nervous System in
Developing and Diapausing Lepidoptera Pupae,
by V. P. Tyshchenko, 20 pp.
RUSSIAN, per, Entomologich Obozren, Vol XLIII,
No 1, 1964, pp 118-130.
JPRS 25463

Problems of Labor Hygiene in Production of
Metallic Thallium and Its Salts, by T. S. Tikhov,
9 pp.
RUSSIAN, per, Gig i San, Vol XXIX, No 2,
1964, pp 23-27.
JPRS 25206

Biological Investigations at the Academy of Sciences
of the USSR, by V. G. Kocherezhkin, 18 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, No 3, May, Jun 1964,
pp 482-489.
JPRS 25550

Effect of the Biologically Active Drug Humizol Upon the
Phagocytic, Macrophagic, Defense Reaction of the
Organism and Upon the Reactive Proliferation of
Connecting Tissue, by V. Kung, 14 pp.
RUSSIAN, per, Iz Ak Nauk Estonskoy SSR, Ser Biol,
Vol XIII, No 1, 1964, pp 3-9.
JPRS 25505

Study of Dermacentor Ticks as Vectors of Bacterium
Pestis Under Experimental Conditions (Report II),
by P. A. Polulyakh, R. V. Grebenyuk.
RUSSIAN, per, Iz Ak Nauk Kirgizskoi SSR Ser Biol
Nauk, Vol IV, No 4, 1962, pp 65-69. 9223076
USDA Tr V-1909

In the Scientific Council for Problems of Physiology
and Biochemistry of Microorganisms Academy
of Sciences USSR, by I. N. Kuksa, 6 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Seriya Biologi,
No 3, May, Jun 1964, pp 492-494.
JPRS 25526

Connection of Nucleolus With Chromosomes, by
R. A. Abdushukurova, 7 pp.
RUSSIAN, per, Iz Ak Nauk Tadzhikskoy SSR, No 3,
1962, pp 42-47.
JPRS 25795

Experience in the Treatment of Patients With
Microwaves, by A. N. Odrosov, L. A. Skurikhina,
10 pp.
RUSSIAN, per, Klinicheskaya Medit, Vol XLII,
No 4, 1964, pp 139-144.
JPRS 25235

Reserve of Strength, by A. Nikolayev, 9 pp.
RUSSIAN, per, Kryliya Rodiny, No 5, 1963,
pp 3-5. 9693477
FTD-TT-64-160

Work of Kuybyshev Institute of Epidemiology,
Microbiology, and Hygiene, by G. Samarin, 5 pp.
RUSSIAN, per, Medit Gazeta, 24 Jan 1964, p 2.
JPRS 25477

Determination of Physiological Age and Age
Distribution Among Feasting Females in Ixodes
Ricinus and Ixodes Persulcatus in the Leningrad
Oblast, by Yu. S. Balashov, 11 pp.
RUSSIAN, per, Medit Parazit i Parazitarnye
Bolezni, Vol XXXI, No 1, 1962, pp 47-55.
NIH 6-21-64

Prospects of the Development of the Chemicopharmac-
euthical Industry in the USSR, by P. V. Gusenkov, 14 pp.
RUSSIAN, per, Medit Prom SSSR, Vol XVIII, No 4,
1964, pp 6-15.
JPRS 25635

**Scientific
Biological and Medical Sciences (Contd)**

On the Relation Between Arterial Pressure Changes
and the State of Certain Regulating Mechanisms in the
Early Periods After Ionizing Radiation, by
A. N. Lanin, 10 pp.
RUSSIAN, per, Medit Radio, Vol VIII, No 8, 1963,
pp 42-48. 9693191
FTD-TT-64-329

The Effect of Whole-Body Alpha-Irradiation Lipolytic
Enzyme Induction by Connective Tissue Cells, by
F. L. Leytes, 7 pp.
RUSSIAN, per, Medit Radio, Vol VIII, No 8, 1963,
pp 54-58. 9693191
FTD-TT-64-329

The Role of Bacteria in Electrochemical Corrosion of
Steel in Sea Water, by L. A. Rozenberg, 13 pp.
RUSSIAN, per, Mikrobiologiya, Vol XXXII, No 4, 1963,
pp 689-694. 9693136
FTD-TT-64-393

On the Accumulation of Fission Products by m
Marine Organisms. I. Accumulation of Sr⁹⁰,
Ye⁹¹ and Ce¹⁴⁴ by Benthic Plants and Animals,
by G. G. Polikarpov.
RUSSIAN, per, Nauchnye Doklady Vysshey Shkoly,
Biolog Nauk, No 3, 1960, pp 97-105.
Ministry of Agri

Reaction of Amoeba Proteus Pall. of Various Ages to
Certain Harmful Influences, by V. V. Isayeva, 7 pp.
RUSSIAN, per, Nauchnye Dok Vysshey Shkoly,
Biolog Nauk, No 2, 1964, pp 11-14.
JPRS 25731

Investigation of Chemoreception of Insects and Ticks
I. Electrical Activity of Chemoreceptors of Haller's
Organ During Action of Repellents, by Yu. A. Yelizarov,
8 pp.
RUSSIAN, per, Nauchnye Dok Vysshey Shkoly,
Biolog Nauk, No 2, 1964, pp 55-59.
JPRS 25731

Action of Acoustic Vibrations on Certain Represent-
atives of Zooplankton of the Black Seas, by N. V.
Lebedev, Ye. V. Fadyev, et al, 5 pp.
RUSSIAN, per, Nauchnye Dok Vysshey Shkoly,
Biolog Nauk, No 2, 1964, pp 94-96.
JPRS 25731

Living and Technological Systems: Some Problems
in Bionics, by V. V. Parin, 11 pp.
RUSSIAN, per, Priroda, Vol LIII, No 5, 1964, pp 20-25.
JPRS 25765

Experimental and Clinicial Study and Theoretical
Foundation of the Operation of Substitution of
Blood, by O. S. Glozman, A. P. Kasatkina, 9 pp.
RUSSIAN, per, Problemy Gematologii i Perelivan,
Vol IX, No 5, pp 3-7.
JPRS 25594

The Relation of Intensity of the Echosignal to the
Duration of the Impulse, by Ye. V. Shishkova.
RUSSIAN, per, Rybnoe Khoz, Vol XXXVIII, No 1,
1962, pp 37-40.
Ministry of Agri

Effect of Ammonia Water on the Yield and
Quality of Various Crops, by A. Ugarov,
V. Panitskiy,
RUSSIAN, per, Sel'skoye Khozyaystvo Sibiri, No 4,
1959, pp 21-27. 9223070
USDA Tr A-1449

Accelerometric Precordial Ballistocardiogram
(Kinetocardiogram) in Hypertension, by I. Ye. Oranskiy,
8 pp.
RUSSIAN, per, Terapev Arkhiv, Vol XXXIV, No 12,
1962, pp 27-32. 9223042
NASA TT F-198

Scientific
Biological and Medical Sciences (Contd)

- Antibiotic Action of Certain Penicillium Fungi on Staphylococcus in Vitro and in Vivo, by A. Z. Ioffe, A. S. Yatskevichyus, et al, 10 pp. RUSSIAN, per, Trudy Institut Eksperim Medit Ak Nauk LSSR, Vol IV-V, 1958, pp 183-191. JPRS 25357
- Feeding and Helminth Fauna of Whalebone Whales, by S. K. Klumov. RUSSIAN, per, Trudy Instituta Okeanologii, Vol LXXI, 1963, pp 94-194. Fisheries Res Bd of Canada
- Toxic and Antimicrobial Substances in the Tissues of Some Sea Invertebrates, by B. V. Chentsov. RUSSIAN, per, Trudy Murmanskogo Morskogo Biol Inst, Vol IV, No 8, 1962, pp 244-249. NIH 6-2-64
- Problem of Typification of the foot-and-Mouth Disease Virus, by K. A. Arifozhanov. RUSSIAN, per, Trudy Uzbek Nauch Issledov Veterinarnyi, Vol XIV, 1961, pp 3-5. 9223072 USDA Tr A-1451
- Diurnal Pattern of Feeding of Cod on the Fishing Grounds of the Barents Sea, by E. S. Zadul'skaya, K. S. Smirnov. RUSSIAN, per, Trudy Vsesoyuznogo Nauchno-Issled Instituta Morskogo Rybnogo Khoz i Okean, Vol IV, 1939, pp 321-338. Fisheries Res Bd of Canada
- Review of Genera and Species of Fishes of the Subfamily Cyclopterinae (Pisces), by G. U. Lindberg, M. I. Legeza, 75 pp. RUSSIAN, per, Trudy Zool Inst Ak Nauk SSSR, Vol XVIII, 1955, pp 389-458. OTS 61-31032 PL-480
- Strengthening of the Alliance Between Chemistry and the Biological Sciences, 9 pp. RUSSIAN, per, Uspekhi Sovrem Biol, Vol LVII, No 1, 1964, pp 3-10. JPRS 25653
- Informational Ribonucleic Acid of Animal Tissue, by G. I. Georgiyev, 26 pp. RUSSIAN, per, Uspekhi Sovrem Biol, Vol LVII, No 1, 1964, pp 11-29. JPRS 25653
- Energy Metabolism of the Cell Nucleus, by V. S. Gaytakhov, 27 pp. RUSSIAN, per, Uspekhi Sovrem Biol, Vol LVII, No 1, 1964, pp 30-49. JPRS 25653
- The Endocrine System and the Reticular Formation of the Brain, by Ya. M. Buntser, 16 pp. RUSSIAN, per, Uspekhi Sovrem Biol, Vol LVII, No 1, 1964, pp 143-158. JPRS 25653
- Ultrasonic Vibrations in Molecular Biophysics, by I. Ye. El'piner, 34 pp. RUSSIAN, per, Uspekhi Sovrem Biol, Vol LVII, No 2, 1964, pp 211-231. JPRS 25651
- Migration of Nucleated Elements in the Posterior Cortex of the Mammalian Lens and Certain Problems of the Morphogenesis of the Crystalline Lens, by E. B. Vsevolodov, V. A. Golichenkov, et al, 15 pp. RUSSIAN, per, Vest Moskov Univ, No 2, 1964, pp 25-37. JPRS 25474
- Certain Data on the Ecology and Biological Activity of the Lily of the Valley *Convallaria Majalis L.*, by I. I. Kropotova, 9 pp. RUSSIAN, per, Vest Moskov Univ, No 2, 1964, pp 73-79. JPRS 25475

Scientific
Biological and Medical Sciences (Contd)

- Determination of Losses of Anhydrous Ammonia in its Application to the Soil, by M. A. Litvinov, F. V. Yanishevskiy, RUSSIAN, per, Vest Sel'skokh Nauk, Vol VII, No 3, 1962, pp 144-148. 9223071 USDA Tr A-1450
- Radiological Hygiene Evaluation of Milk and Meat From Cows Affected by Radio-Iodine, by V. G. Il'in, 5 pp. RUSSIAN, per, Veterinariya, Vol XXXVIII, No 3, 1961, pp 69, 70. 9222971 AEC-NP-Tr-1136
- Properties of Hog Cholera Virus Grown in Tissue Cultures, by V. G. Airapetyan, A. B. Khachatryan, et al, RUSSIAN, per, Veterinariya, Vol XL, No 10, 1963, pp 29-30. 9223107 USDA Tr V-1926
- Immunity and Blood Protein of Piglets in a Normal State, With Hog Cholera, and After ASV Inoculation, by A. A. Konopatin. RUSSIAN, per, Veterinariya, Vol XL, No 11, 1963, pp 43-47. 9223112 USDA Tr V-1932
- Several Epizootiological Features of Atrophic Rhinitis and Measures for Controlling It, by I. T. Nechval'. RUSSIAN, per, Veterinariya, Vol XL, No 11, 1963, pp 47-49. 9223113 USDA Tr V-1933
- The Problem of Producing Infectious Atrophic Rhinitis in Swine Experimentally, by L. S. Barzylis. RUSSIAN, per, Veterinariya, Vol XL, No 11, 1963, pp 52, 53. 9223114 USDA Tr V-1934
- A Comparison of Trace Imitation With Conditioned Trace Reflexes in the Chimpanzee, by L. A. Firsov, 17 pp. RUSSIAN, per, Voprosy Antropol, No 13, 1964, pp 52-68. JPRS 25492
- Change in the Serum Protein of Patients With Chronic Radiculitis During Treatment With Vibration Baths, by A. Ya. Kreymmer, 7 pp. RUSSIAN, per, Voprosy Medit Khim, Vol X, No 2, 1964, pp 144-148. JPRS 25234
- The Effect of Radiation on the RNA and RNA Metabolism in Cells of a Human Malignant Tumor, by Ye. V. Budnitskaya, M. Brunfaut, et al, 8 pp. RUSSIAN, per, Voprosy Medit Khim, Vol X, No 2, 1964, pp 179-184. JPRS 25233
- Copper Metabolism in Hepatolenticular Degeneration, by A. A. Mittel'shtedt, L. K. Bauman, 6 pp. RUSSIAN, per, Voprosy Medit Khim, Vol X, No 3, May, Jun 1964, pp 252-256. JPRS 25665
- Ribonucleic Acid and Collagen Synthesis by Fibroblasts During Connective Tissue Growth, by V. N. Smirnov, V. I. Mazurov, et al, 8 pp. RUSSIAN, per, Voprosy Medit Khim, Vol X, No 3, May, Jun 1964, pp 305-310. JPRS 25667
- Regeneration of the Peripheral Nerve at Different Periods Following Its Primary Suturing in an Infected Gunshot Wound, by V. F. Shefer, 6 pp. RUSSIAN, per, Voprosy Neyrokhirurg, Vol XXVIII, No 3, May, Jun 1964, pp 23-27. JPRS 25588

**Scientific
Biological and Medical Sciences (Contd)**

An Analysis of the Causes Underlying Unsuccessful Nerve Suturing Following Gunshot Wounds in the Extremities, by V. L. Kachayev, 5 pp.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XXVIII, No 3, May, Jun 1964, pp 27-29. 9223077
JPRS 25588

The Duration of Immunity Following Simultaneous Skin Vaccination Against Plague Tularemia and Brucellosis, by S. L. Borod'ko, L. G. Samsonovich.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 10, 1963, pp 70-74. 9223077
USDA Tr V-1910

Approbation of the Improved Tularemia Diagnosticum, by O. S. Emel'yanova, O. V. Ravdonikas, et al.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 10, 1963, pp 85-92. 9223078
USDA Tr V-1911

An Experimental Study of the Pathogen of the Rocky Mountain Spotted Fever, by S. M. Kulagin, R. I. Kudelina.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 10, 1963, pp 92-96. 9223079
USDA Tr V-1912

A Comparative Study of Vaccine and Virulent Anthrax Strains in Tissue Cultures of the Human Embryo, by N. N. Ginsburg, Yu. M. Fedotova,
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 11, 1963, pp 3-7. 9223080
USDA Tr V-1913

Dry AKZH(Autolysate of Sprat, Gelatin Medium for the Diagnosis of Food Poisonings Caused by Cl. Botulinum and Perfringens), by L. G. Ivanova, T. I. Sergeyeva, et al.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 11, 1963, pp 111-114. 9223081
USDA Tr V-1914

On the Change of Conditions of Existence of The Natural Tularemia Focus in the Northern Part of the Volgo-Akhtubinsk Flood Plain in Connection With the Construction of the Volgograd Hydroelectric Power Station, by N. G. Olsuf'yev, V. V. Kucheruk, et al.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 11, 1963, pp 127-132. 9223082
USDA Tr V-1915

An Accelerated Method of Diagnosis of Tularemia Pathogen in the Corpses of Rodent by A. I. Leont'yev.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 11, p 146. 1963. 9223083
USDA Tr V-1916

A Study of the Method of Mass Aerosol Immunization With Powder Plague Vaccine, by N. I. Aleksandrov, N. E. Gefen, et al.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 12, 1963, pp 22-28. 9223104
USDA Tr V-1923

Comparative Study of Virulent and Vaccine Strains of Pasteurella (Francisella) Tularensis in Human Embryo Tissue Culture, by Yu. M. Fedotova,
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 12, 1963, pp 84-88. 9223106
USDA Tr V-1925

Data on the Epidemiology and Clinical Aspects of anthrax, by A. Ya. Zaporozhchenko.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 12, 1963, pp 117, 118. 9223105
USDA Tr V-1924

The Nonspecificity of Indirect Hemagglutination Reaction in Botulin Detection in Food, by T. I. Bulatova.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XLI, No 1, 1964, pp 96-101. 9223084
USDA Tr V-1917

**Scientific
Biological and Medical Sciences (Contd)**

Change of the Nitrogenous Composition of the Broth Made from the Dry Preparation KPD During The Process of Cultivation of Pathogens of Types A, B, C, And E Botulism, by L. G. Ivanova, T. I. Sergeyeva.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XLI, No 1, 1964, pp 101-108. 9223085
USDA Tr V-1918

Search for Effective Chemical Vaccines Against Some Zoonoses. Report No 4. Experiences in Producing Chemical Anthrax Vaccine Under Semiindustrial Conditions, by N. I. Aleksandrov, N. E. Gefen, et al.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XL, No 1, 1964, pp 119-125. 9223101
USDA Tr V-1919

The Role of Birds in Circulating the Causative Agent of Tick-Borne Exanthematous Typhus (Rickettsial Fever Occurring in Siberia) in Nature, by G. P. Somov, G. M. Soldatov,
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 1, 1964, pp 126-129. 9223102
USDA Tr V-1920

Serological Research on Plague. Communication XIV Testing Several Serological Reactions During Epizootological Examinations in the Natural Plague Foci, by Yu. G. Suchkov.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 1, 1964, pp 135-141. 9223102
USDA Tr V-1921

Results of Growing the Pathogen of North Asiatic Tick-Borne Rickettsial Fever (Siberian Rickettsial Fever) in Tissue Cultures, by V. A. Silich.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 1, 1964, pp 141-142. 9223108
USDA Tr V-1927

Effectiveness of Various Anti-Tularemia Vaccination Methods, by V. P. Motornaya.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 2, 1964, pp 43-48. 9223103
USDA Tr V-1922

Calculating the Epidemiological Efficacy on Anti-Brucellosis Vaccination, by M. P. Kozlov.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 2, 1964, pp 60-64. 9223109
USDA Tr V-1928

The Possibility of Simultaneous Experiments Anti-Tularemia and Anti-Small pox Vaccination, by R. A. Savel'yeva.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 2, 1964, pp 85-88. 9223110
USDA Tr V-1929

Brucellosis Lesions in the Spine and Sacroiliac Joints of Rabbits in Repeated Reinfection, by D. P. Mergold.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 2, 1964, p 143. 9223111
USDA Tr V-1930

The Spread and Control of Brucellosis in the Armenian SSR, by A. G. Mnatsakanyan.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 2, 1964, p 149. 9223111
USDA Tr V-1931

Growth Related Changes in the Zinc Content of Human Blood, by T. L. Dudina, 7 pp.
BELORUSSIAN, per, Vessi Ak Navuk BSSR, Seriya Biyalagichnykh Navuk, No 1, 1964, pp 87-89.
JPRS 25364

Scientific
Biological and Medical Sciences (Contd)

- Determination on Certain Trace Elements in Radiation Dermatitis, by A. Ya. Prokopchuk, A. T. Sosnovskiy, et al, 13 pp.
BELO-RUSSIAN, per, Vestsi Ak Navuk Belorussian SSR, Ser Biylahich Navuk, No 1, 1964, pp 92-96.
JPRS 25502
- The Effect of Fractional X-Ray Irradiation on the Activity of Hexokinase and Aldolase of the Brain and Muscle Tissue of Rats, by M. F. Silyayeva, 15 pp.
BELO-RUSSIAN, per, Vestsi Ak Navuk Belarusskay SSR, Ser Biylahich Navuk, No 1, 1964, pp 101-106.
JPRS 25630
- Several Problems of Microbial, Especially Bacterial, Classification by Yen Hsueh-ch'iu, 21 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 406-415.
JPRS 25741
- Influence of Ionic Radiation on the Respiratory Control of Liver Mitochondria, by Yang Fu-yu, Li Chin-chao, 8 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 441-443.
JPRS 25741
- Conditions for Clinical Research in Denmark, by P. Anthonisen, 10 pp.
DANISH, per, Nordisk Medicin, Vol LXVIII, No 43, 1962, pp 1379-1381.
NIH 6-13-64
- Research on Lipids, by J. Boldingh.
DUTCH, per, Chemisch Weekblad, Vol LIX, No 23, 1963, pp 317-325.
Fisheries Res Bd of Canada
- Hypnosis and Suggestion, by Paul Chauchard.
FRENCH, bk.
Walker & Co
- Pulmonary Mycosis, by R. Vanbreughseghem.
FRENCH, per, Acta Tuberc et Pneum Belgica, Vol LIV, 1963, pp 177-190.
*Navy/NMS
- Neuraminidase Activity of Myxovirus Influenzae A and B and Myxovirus Parainfluenzae 1 (Sendai Virus) on the Mucopolysaccharide of the Bovine Submaxillary Gland: Effect on Viscosity, by L. Colobert, R. Fontanges, 11 pp.
FRENCH, per, Annales de l'Institut Pasteur, Vol CIV, 1963, pp 734-745.
NIH 6-22-64
- Restoration of the Contractility of the Myocardium Between Contractions and the Phenomena of Potentiation, by Kruta, 20 pp.
FRENCH, per, Archives Internat de Physiologie et de Biochimie, Vol LXIX, No 5, 1961, pp 645-667.
NIH 6-24-64
- Report on the Activities of the Hellenic Pasteur Institute in the Course of the Year 1961, by P. Mercier, 13 pp.
FRENCH, per, Archives de l'Institut Hellenique, 1961/62, pp 17-26. (Call No Not Given, Eng Tr)
Army Map Service
- Report on the Activities of the Hellenic Pasteur Institute in the Course of the Year 1962, by J. Bruneau, 12 pp.
FRENCH, per, Archives de l'Institut Hellenique, 1962/63, pp 107-115. (Call No Not Given, Eng Tr).
Army Map Service
- On the Terms of Application of Pearson's Chi-Square Criterion, by A. Vessereau.
FRENCH, per, Bulletin de l'Institut International de Statistique, Vol XXXVI, No 3, 1958, pp 87-101.
NIH 6-1-64

Scientific
Biological and Medical Sciences (Contd)

- Acute Infectious Myocarditis, by R. Tricot.
FRENCH, per, Coeur et Medicine Interne, Vol II, No 3, 1963, pp 265-279.
*Navy/NMS
- A Study on the Testosterone-Serumalbumine Bond and the Effect of Heptane on the Serumalbumine Molecule, by Annette Alfsen.
FRENCH, per, Comptes Rendus des Travaux du Laboratoire Carlsberg, Vol XXXIII, No 11, 1963, pp 415-431.
*Navy/NMS 893
- Report of the Commission on Commercial and Handicraft Occupations, by Giorza, 6 pp.
FRENCH, np, Cooperation Hebdo, No 36, 8 May 1964, p 3, 15 May, pp 1, 3.
JPRS 25335
- Medical Situation in Algeria, 5 pp.
FRENCH, np, Revolution Africaine, No 68, 16 May 1964, p 6.
JPRS 25335
- Cerebral Function in Infancy and Childhood, by Albrecht Piper.
GERMAN, bk.
Consultants Bureau
- The Effect of Urea on the Molecular Structure of Lactate Dehydrogenase From Pig Heart, by Rainer Jaenicke, Gerhard Pfeleiderer, 25 pp.
GERMAN, per, Biochimica et Biophysica Acta, Vol LX, No 3, 1962, pp 615-629.
Navy Tr 3864/NMS 889
- Preparation and Length Measurements of the Total Deoxyribonucleic Acid Content of T2 Bacteriophages, by A. K. Kleinschmidt, D. Lang, 8 pp.
GERMAN, per, Biochimica et Biophysica Acta, Vol LXI, 1962, pp 857-864.
NIH 6-12-64
- Bacterial Lipids. The Lipids of Salmonella Ballerup, Paracolobactrum Ballerup, by S. Cmelik, B. Brisk, 10 pp.
GERMAN, per, Hoppe-Seyler's Zeit fuer Physiologische Chemie, Vol CCXCIII, 1953, pp 222-229.
NIH 6-3-64
- On Bacterial Lipids. Investigation of Different Lipid Fractions of Salmonella Paratyphi C., by S. Cmelik, 9 pp.
GERMAN, per, Hoppe-Seyler's Zeit fuer Physiologische Chemie, Vol CCXCVI, 1954, pp 67-73.
NIH 6-5-64
- Contribution to the Knowledge of the Lipids Bacteria. V. Report on Bacterial Lipids, by S. Cmelik, 11 pp.
GERMAN, per, Hoppe-Seyler's Zeit fuer Physiologische Chemie, Vol CCXCIX, 1955, pp 227-234.
NIH 6-4-64
- The Complexly-Bound Lipids of Diptheria Bacteria From Different Nutrient Solutions, by S. Cmelik, 9 pp.
GERMAN, per, Hoppe-Seyler's Zeit Physiologische Chemie, Vol CCC, 1955, pp 167-173.
NIH 6-15-64
- Phosphatides of Typhoid Bacteria, VIII - Report on Bacterial Lipoids, by S. Cmelik, 14 pp.
GERMAN, per, Hoppe-Seyler's Zeit fuer Physiologische Chemie, Vol CCCII, 1955, pp 20-28.
NIH 6-18-64

Scientific
Biological and Medical Sciences (Contd)

Water Content and Osmoregulation of Plaice and Flounder, by J. Henschel.
GERMAN, per, Wissenschaftliche Meeresuntersuchungen
Kiel, Vol XXII, 1936, pp 91-121.
Ministry of Agri

Dysbakterie as a Problem for the Microbiologist,
by H.P.R. Seeliger, 36 pp.
GERMAN, per, Zentralblatt fuer Bakteriologie,
Vol CLXX, 1958, pp 288-316.
NIH 6-8-64

Radical Operation for Femoral Hernia, by
George Lotheissen, 5 pp.
GERMAN, per, Zentralblatt fuer Chirurgie,
Vol XXV, 1898, pp 548-550.
Navy Tr 3865/NMS 890

On a New Method of Bacterial Cultivation and Its
Application to Obtaining a New Anti-Anthrax Vaccine,
by B. S. Levin, J. Stein, 28 pp.
HEBREW, per, Refuah Veterinarit, Jan 1942.
9222957
AEC-NP-Tr-1131

Influence of Reduced Effective Circulating Blood
Volume on Venous Blood Pressure and Tone, by
F. Solti, M. Iskum, 9 pp.
HUNGARIAN, per, Kiserletes Orvostudomány,
Vol XV, No 3, 1963, pp 300-304. 9693217
FTD-TT-64-273

Difficulties in Diagnosing Certain Child Psychoses,
by Kiss Gegesi, Lucy Liebermann, 47 pp.
HUNGARIAN, Kozlemenyei, A Magyar Tudományos
Akademia, Biol es Orvosi Tudományok Osztályának,
Vol XIV, No 1, 1963, pp 15-39. 9693213
FTD-TT-64-51

Double "Bruit de Canon", by Gyula Kerkovits, 9 pp.
HUNGARIAN, per, Orvosi Hetilap, Vol CIV, No 17,
1963, pp 799-801. 9693234
FTD-TT-64-270

Contribution to the Study of Intranuclear pH
in the Salivary Gland Cells of Chironomus Thummi
Kief, by Giuseppe Bertani.
ITALIAN, rpt, 19457.
*Navy/NMS 892

On the Mandatory Anti-Tetanus Vaccination,
by Giuseppe Schillaci, 6 pp.
ITALIAN, per, Annali della Sanita Pubblica,
1964, pp 39-43. (Call No IE6 IH2, Eng Tr)
Army Map Service

Interrelations Between Sexual Functions and
Morphologic Composition of the Blood, by
Egidio Tosatti, 10 pp.
ITALIAN, per, Haematologica, Vol XIX, 1938,
pp 495-507.
NIH 6-6-64

Two Neurohormones: Acetylcholine and
Adrenalin, in the Biochemistry of the
Awakening Process, by H. Emanuelli, S. Testa,
6 pp.
ITALIAN, per, Minerva Anestesiologia,
Vol XXIX, 1963, pp 133-135.
NIH 6-20-64

New Considerations on the Physiopathological
Mechanisms of Variations of Consciousness, by
G. F. Rossi, 28 pp.
ITALIAN, per, Minerva Neurochirurgica, Vol VI,
No 4, 1962, pp 129-141.
NIH 6-7-64

Endolymphatic Radiotherapy Technical and
Physico-biological Aspects, by G. L. Buraggi,
49 pp.
ITALIAN, per, La Radiologia Medica,
Vol XLIX, 1963, pp 238-273.
NIH 6-25-64

Scientific
Biological and Medical Sciences (Contd)

The Change of the Lipid System in Fish Meat at
Several Treating and Manufacturing Courses, by
Katsutoshi Miwa
JAPANESE, per, Bulletin of the Hokkaido Regional
Fisheries Research Laboratory, No 26, 1963,
pp 129-134.
*Fisheries Res Bd of Canada

Studies on Bacterial Amylase Part 28. Formation of
Bacterial Amylase. Influence of Metal Salts on
Enzyme Formation, by J. Fukumoto.
JAPANESE, per, Nippon Nogei-Kagaku Kaishi,
Vol XXXIV, 1960, pp 475-479.
*AEC

Birds of Prey, by Jan Sokolowski, 51 pp.
POLISH, pamphlet, Ptaki Drapieżne, Warsaw, 1956,
64 pp.
OTS 63-11360
PL-480

Migrations of Birds, by Janusz Domaniewski, 41 pp.
POLISH, pamphlet, Wędrowki Ptaków, Warsaw, 1958,
50 pp.
OTS 63-11359
PL-480

Influence of Long Feeding of Rations on the Capability
of Ruminants to Assimilate It, by L. Kielisz,
J. Skulmowski, 7 pp.
POLISH, per, Annales Universitatis Mariae Curie-
Sklodowska, Vol X, No 2, 1955, pp 57-65.
OTS 60-21575
PL-480

Studies on the Occurrence of a- and B-Carotenes
in the Plant Kingdom, by A. Sykut, Z. Wierzchowski,
10 pp.
POLISH, per, Annales Universitatis Mariae Curie-
Sklodowska, Vol XIII, No 15, 1958, pp 261-271.
OTS 60-21575
PL-480

The Effect of Treatment With Fast-Cutting Dental
Machines on the Dental Pulp, by J. Krzywicki, 12 pp.
POLISH, per, Czasopismo Stomatologiczne, Vol XVI,
No 2, 1963.
OTS 63-11409/5
PL-480

The Effect of Adreanalin and Adrenalin With
Procaine on Electrocardiogram in Dogs With
Experimental Coronary Disease and in Myocardial
Damage, by H. Adamczyk, R. Adamczyk, 8 pp.
POLISH, per, Czasopismo Stomatologiczne, Vol XVI,
No 6, 1963.
OTS 63-11409/5
PL-480

Prognostic Value of Determinations of Pseudocholinesterase
(sChE) Activity in Tuberculosis, by
A. Ostrowska, J. Owsinski, 5 pp.
POLISH, per, Gruzlica i Choroby Pluc, Vol XXXI,
No 1, 1963.
OTS 63-11409/5
PL-480

Serum Lipase in Tuberculosis, by M. Piotrowski,
6 pp.
POLISH, per, Gruzlica i Choroby Pluc, Vol XXXI,
No 2, 1963.
OTS 63-11409/5
PL-480

Studies on the Blood Enzymes in Tuberculosis
IV. The Influence of Tuberculin on Pseudocholinesterase
Activity (sChE), by A. Ostrowska, J. Owsinski,
5 pp.
POLISH, per, Gruzlica i Choroby Pluc, Vol XXXI, No 2,
1963.
OTS 63-11409/5
PL-480

Scientific
Biological and Medical Sciences (Contd)

Adequate Preoperative Treatment and Specific Complications After Lung Tissue Resection (The Significance of Bacteriological Remission at the Time of Operation, by J. Langer, Z. Mankowski, 8 pp.

POLISH, per, Gruzlica i Choroby Pluc, Vol XXXI, No 3, 1963.

OTS 63-11409/6
PL-480

Studies on Blood Enzymes in Tuberculosis. The Behavior of Got Activity in the Cerebrospinal Fluid and in the Blood Serum of Patients With Tuberculous Cerebrospinal Meningitis, by Z. Kropaczek, A. Ostrowska, 7 pp.

POLISH, per, Gruzlica i Choroby Pluc, Vol XXXI, No 4, 1963.

OTS 63-11409/5
PL-480

General Physical and Chemical Characteristics of Pigments Extracted From Atypical Bacilli, by A. Odrzywolska, 9 pp.

POLISH, per, Gruzlica i Choroby Pluc, Vol XXXI, No 5, 1963.

OTS 63-11409/5
PL-480

Disorders of Localization in the Sensory Asymmetry of the Retina, by Z. Falkowska, 20 pp.

POLISH, per, Klinika Oczna, Vol XXXIII, No 1, 1963.

OTS 63-11409/5
PL-480

Electromyographic Investigation of Paralysis of the Oculomotor Nerve, by W. J. Orlowski, S. Wojtowicz, 22 pp.

POLISH, per, Klinika Oczna, Vol XXXIII, No 2, 1963.

OTS 63-11409/6
PL-480

Degeneration and Regeneration of Nervous Fibers in Lyophilized Corneal Craft, by B. Szwarc, 9 pp.

POLISH, per, Klinika Oczna, Vol XXXIII, No 3, 4, 1963.

OTS 63-11409/5
PL-480

Some Anabolic Hormones and Experimental Atrophy of Skeletal Muscle, by M. Pawlikowski, T. Romer, 9 pp.

POLISH, per, Neurologia, Neurochirurgia i Psychiatria Polska, Vol XIII, No 1, 1963.

OTS 63-11409/5
PL-480

The Potassium Level in Dystrophic Muscles, by I. Niebroj-Dobosz, I. Hausman-Petrusowicz, 6 pp.

POLISH, per, Neurologia, Neurochirurgia i Psychiatria Polska, Vol XIII, No 4, 1963.

OTS 63-11409/5
PL-480

Treatment of Bladder Carcinoma With X-Rays, by A. Hlindak, 11 pp.

POLISH, per, Nowotwory, Vol XIII, No 1, 1963.

OTS 63-11409/6
PL-480

Malignant Synovioma (An Attempt at Histo-Clinical Correlation), by K. Smolak, K. Szczygiel, 8 pp.

POLISH, per, Nowotwory, Vol XIII, No 1, 1963.

OTS 63-11409/6
PL-480

The Technique of Hypophysis Destruction With Yttrium 90 in the Light of Own Experience, by C. Gorski, Z. Malinowski, 10 pp.

POLISH, per, Nowotwory, Vol XIII, No 1, 1963.

OTS 63-11409/6
PL-480

Scientific
Biological and Medical Sciences (Contd)

Studies on Toxic Effects of Kanamycin and Neomycin on the Corti's Organ in Animal Experiments, by S. Kossowski, J. Gieldanowski, 7 pp.

POLISH, per, Otolaryngologia Polska, Vol XVII, No 1, 1963.

OTS 63-11409/6
PL-480

Measurements of Mechanical and Acoustic Effects During Gouging and Boring of the Temporal Bone, by S. Iwankiewicz, T. Wawrykowicz, 8 pp.

POLISH, per, Otolaryngologia Polska, Vol XVII, No 3, 1963.

OTS 63-11409/6
PL-480

The Role of Inflammatory Conditions of the Paranasal Sinuses and the Adenoidal System in the Pathogenesis of Allergic Diseases in Children, by J. Danielewicz, 11 pp.

POLISH, per, Otolaryngologia Polska, Vol XVII, No 4, 1963.

OTS 63-11409/5
PL-480

Studies on Fibrillogenesis in Cultures of Neoplastic Tissues, by M. Rozynek, W. Krawczyk, 11 pp.

POLISH, per, Patologia Polska, Vol XIV, No 1, 1963.

OTS 63-11409/6
PL-480

Familial Syndrome of General Dysplasia of the Connective Tissue and of the Vascular System Associated With Angioblastoma of the Spinal Canal, by A. Gluszczyk, Z. Polis, 13 pp.

POLISH, per, Patologia Polska, Vol XIV, No 1, 1963.

OTS 63-11409/6
PL-480

Obliterating Endarteritis in the Course of Tuberculous Cerebrospinal Meningitis, by A. Rosnowski, 10 pp.

POLISH, per, Patologia Polska, Vol XIV, No 1, 1963.

OTS 63-11409/5
PL-480

Studies on the Electrophoretic Picture of Blood Serum in Premature Infants, by T. Kibalenko, L. Pannert, 11 pp.

POLISH, per, Pediatría Polska, Vol XXXVIII, No 2, 1963.

OTS 63-11409/5
PL-480

Studies on Uropepsin Excretion in Children Suffering From Diabetes, by B. Deblec, M. Kwiatkowska, 12 pp.

POLISH, per, Pediatría Polska, Vol XXXVIII, No 3, 1963.

OTS 63-11409/6
PL-480

Investigations on the Influence of Treatment of Rheumatic Fever in Children With Cortico-Steroids and Salicylates on Gastric Juice Acidity, by W. Gasecki, E. Torbicka, 9 pp.

POLISH, per, Pediatría Polska, Vol XXXVIII, No 3, 1963.

OTS 63-11409/6
PL-480

Comparative Polarographic and Electrophoretic Studies on Serum Protein, by A. Kleczenski, A. Cieślinska, 5 pp.

POLISH, per, Polski Tygodnik Lekarski, Vol XVII, No 10, 1963.

OTS 63-11409/5
PL-480

Scientific
Biological and Medical Sciences (Contd)

- Studies on Natural and Specific Immunity in Uranium Mine Workers, by H. Dominas-Kuczkowska, 10 pp.
POLISH, per, Polski Tygodnik Lekarski, Vol XVII, No 10, 1963.
OTS 63-11409/5
PL-480
- Hypotensive Duodenography in the Diagnosis of Subacute Pancreatitis, by K. Czyzewski, L. Oleszkiewicz, 5 pp.
POLISH, per, Polski Tygodnik Lekarski, Vol XVIII, No 6, 1963.
OTS 63-11409/5
PL-480
- The Activity of Some Enzymes in the Course of Infectious Mononucleosis, by A. Malik, 10 pp.
POLISH, per, Polski Tygodnik Lekarski, Vol XVIII, No 11, 1963.
OTS 63-11409/6
PL-480
- Possibilities and Limits of Neuropathologic Diagnosis of Rabies (Encephalitis Rabica), By E. Osetowska, N. Glawdzin, 13 pp.
POLISH, per, Polski Tygodnik Lekarski, Vol XVIII, No 13, 1963.
OTS 63-11409/5
PL-480
- Experimental Portal Hypertension and Ascites Following Partial Stricture of the Common Bile Duct, by W. L. Oleszewski, S. Szyfelbejn, 10 pp.
POLISH, per, Polski Tygodnik Lekarski, Vol XVIII, No 13, 1963.
OTS 63-11409/5
PL-480
- Electrocardiogram as a Dynamic Prognostic Index in the Treatment of Hypothyreosis, by S. Zgliczynski, 6 pp.
POLISH, per, Polskie Archiwum Medycyny Wewnętrznej, Vol XXXIII, No 2, 1963.
OTS 63-11409/5
PL-480
- Electrocardiogram as a Dynamic Prognostic Index in the Treatment of Hyperthyreosis, by S. Zgliczynski, 9 pp.
POLISH, per, Polskie Archiwum Medycyny Wewnętrznej, Vol XXXIII, No 3, 1963.
OTS 63-11409/5
PL-480
- The Value of Cranial Rheoangiography in the Diagnosis of Cerebral Atherosclerosis, by A. Czernik, W. Serzysko, 6 pp.
POLISH, per, Polskie Archiwum Medycyny Wewnętrznej, Vol XXXIII, No 3, 1963.
OTS 63-11409/6
PL-480
- Studies on the Direct Effect of the Kidneys and on the Glomerular Filtration, by Z. Piotrowski, 6 pp.
POLISH, per, Polskie Archiwum Medycyny Wewnętrznej, Vol XXXIII, No 4, 1963.
OTS 63-11409/6
PL-480
- Effect of Age on Connective Tissue Compounds of the Wall of Aorta and Coronary Arteries, by B. Bielecki, 15 pp.
POLISH, per, Polskie Archiwum Medycyny Wewnętrznej, Vol XXXIII, No 4, 1963.
OTS 63-11409/6
PL-480
- Part II. Clinical, by A. Krotkiewski, 16 pp.
POLISH, per, Polskie Archiwum Medycyny Wewnętrznej, Vol XXXIII, No 4, 5, 1963.
OTS 63-11409/6
PL-480

Scientific
Biological & Medical Sciences (Contd)

- Alkaline Phosphatase in Urine and Blood in Renal Diseases, by A. Krotkiewski, 9 pp.
POLISH, per, Polskie Archiwum Medycyny Wewnętrznej, Vol XXXIII, No 4, 5, 1963.
OTS 63-11409/6
PL-480
- Catches of Flounder *Pleuronectes flesus* L. in the Bornholm Deep in 1951-1955, by Zbigniew Reimann, 23 pp.
POLISH, per, Prace Morskiego Instytutu Rybackiego w Gdyni, No 10/A, 1959, pp 441-459.
OTS 61-11365
PL-480
- Cysteine Desulphydrase and Rodanase Activity in Human Tissues, by J. Frendo, A. Koj, 6 pp.
POLISH, per, Przegląd Lekarski, Vol XIX, No 2, 1963, 6 pp.
OTS 63-11409/5
PL-480
- Effects of Protein Quality in Diet on Vitamin A Content in Liver, Kidney and Blood Serum of Rats, by B. Dietl, 13 pp.
POLISH, per, Roczniki P. Z. H., Vol XIV, No 1, 1963.
OTS 63-11409/6
PL-480
- Application of the Test on Newts (*Triturus cristatus*) For Quick Detection of Carcinogenic Properties of Dyes, by S. Krauze, E. Stec, 9 pp.
POLISH, per, Roczniki Państwowego Zakładu Higieny, Vol XIV, No 1, 2, 1963.
OTS 63-11409/5
PL-480
- Investigations on the Mycotrophy of Pine Associations in Leba on the Baltic Coast, by Tadeusz Dominik, Roman Pachlewski, 37 pp.
POLISH, per, Roczniki Sekcji Dendrologicznej Polskiego Towarzystwa Botanicznego, Vol X, 1955, pp 53-96.
OTS 61-11331
PL-480
- Secondary Parasites of Forest Injurious Insects. Superfamily Chalcidoidea, by Franciszek Morawski, 12 pp.
POLISH, per, Wydawnictwa Szkoły Głównej Gospodarstwa Wiejskiego, Vol I, 1934.
OTS 61-11342
PL-480
- Zoonoses Transmittable to Man, by A. B. De Castro Soares, L. Cayola Da Mota, 24 pp.
PORTUGUESE, per, Hospitais Portugueses, 1963, pp 40-50. (Call No Not Given, Eng Tr)
Army Map Service
- Lipase Index and Altitude, by Lina Filho, PORTUGUESE, per, Revista di Medicina Aeronautica, Vol VIII, 1955, pp 31-36.
*Navy/NMS
- Psychiatry in the Soviet Union, by Nikola Persic, 25 pp.
SERBO-CROATIAN, per, Liječnički Vjesnik, Vol LXXXV, No 7, 1963, pp 747-758. 9693223
FTD-TT-64-259
- Apparent Relationship Among the Daily Time Course of the Terrestrial Magnetic Components, Certain Solar Elements, the Human Diastolic Pressure, and the Total Leukocyte Counts, by A. Alvarez Martinez, 14 pp.
SPANISH, per, Puerto Rico Journal of Public Health and Tropical Medicine, Vol X, No 3, 1935, pp 374-387.
NIH 6-9-64

Scientific
Biological & Medical Sciences (Contd)

- Hypoalbuminemia in Pericarditis: Mechanism and Results. Study Made With Labelled Proteins on the Rate of Loss and Restitution of Plasma Albumin, by C. Jimenez Diaz, J. M. Linazasoro, 9 pp.
SPANISH, per, Revista Clinica Espanola, Vol LXXVII, 1960, pp 252-256.
NIH 6-23-64
- Evaluation of the Nutritional State in School Children of the City of Durango, Study on 11,406 Children, by L. Vega Franco, 24 pp.
SPANISH, per, Salud Publica de Mexico, Vol IV, No 3, 1962, pp 385-401.
NIH 6-19-64
- The Cytology of Allium Cepa x Fistulosum, by A. Levan.
SWEDISH, per, Hereditas, Vol XX, No 21, 1955, 1956, pp 195-214.
*AERE-Harwell
- Physiological Analysis of the Effects of Preceding Muscular Efforts on the Working Capacity of Unfatigued Muscles, by I. V. Muravov, F. T. Tkachov, 11 pp.
UKRAINIAN, per, Fiziol Zhur, Vol X, No 2, Mar, Apr 1964, pp 163-170.
JPRS 25593
- Normal Spatial Vectorcardiogram in Laboratory Animals Dogs, Cats, and Rabbits, and Methods for Its Recording, by M. Ye. Kvintitskiy, 9 pp.
UKRAINIAN, per, Fiziol Zhur, Vol X, No 2, Mar, Apr 1964, pp 177-182.
JPRS 25599
- Mechanism of Action of Ultrasound on Processes of Resorption in the Gastro-Intestinal Tract, by V. R. Faytel'berg-Blank, 13 pp.
UKRAINIAN, per, Fiziol Zhur, Vol X, No 2, Mar, Apr 1964, pp 227-234.
JPRS 25600
- Effect of Adrenalectomy in White Rats Adapted to Hypoxia on Resistance to Radial Acceleration, by V. P. Dudarev, 6 pp.
UKRAINIAN, per, Fiziol Zhur, Vol X, No 2, Mar, Apr 1964, pp 274-277.
JPRS 25601

Scientific
Chemistry

- The Mossbauer Effect and Its Applications in Chemistry, by V. I. Gol'danskiy.
RUSSIAN, bk.
Consultants Bureau
- Fiberglass Boat Building, by B. A. Arkhangel'skiy, I. M. Al'shits, 165 pp.
RUSSIAN, bk, Suda iz Plastmass, Leningrad, 1963, 2nd Ed., pp 1-160.
JPRS 25575
- Change of Protein Macromolecular Size During Breakdown of Their Ternary Structure in the Process of the Cleavage of the Disulfide Bonds, by G. V. Samsonov, R. B. Ponomareva, et al, 5 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLIV, No 6, 1964, pp 1448-1451.
JPRS 25340

Scientific
Chemistry (Contd)

- The Effect of Pro and Antioxidants on the Lubricating Action of Mineral Oils, by G. V. Vinogradov, Gokuo-lin Liang, et al.
RUSSIAN, per, Neftekhim, Vol I, No 3, 1961, pp 427-432.
*FTD-TT-64-848
- On a Method of Quantitative Gas Analysis by Electronic-Vibrational Spectra of Diatomic Molecules, by L. V. Leakov.
RUSSIAN, per, Optika i Spektro, Vol IV, No 2, 1958, pp 168-179.
*AEC
- Full Scope to Chemical Science, by N. N. Semenov.
RUSSIAN, np, Pravda, 6 Feb 1964, pp 2, 3.
NLL Tr Bulletin
Vol VI, No 7, 1964
- The Physical and Chemical Fundamentals of Magnetic Water Treatment, by V. I. Minenko, S. M. Petrov, 7 pp.
RUSSIAN, per, Teplotekhnika, No 9, 1962.
JPRS 25794
- Comparative Characteristics of Spectrophotometric Methods for Identifying Tantalum and Niobium, by A. T. Pilipenko, O. M. Eremenko, 13 pp.
RUSSIAN, per, Ukrainskiy Khim Zhur, Vol XXXIX, No 5, 1963, pp 532-538. 9093137
FTD-TT-64-370
- On Enthalpies of Formation of Ion Compounds, by A. F. Vorob'yev.
RUSSIAN, per, Vest Moskov Univ, Ser II, Khim, Vol XVIII, No 3, 1963, pp 45-47.
*AEC
- Enthalpies of Formation of Ions OH, Kt, Nat, Lit in Aqueous Solutions, by A. F. Vorob'yev.
RUSSIAN, per, Vest Moskov Univ, Ser II, Khim, Vol XVIII, No 3, 1963, pp 48-51.
*AEC
- Polymers With a Conjugated Bond System and Heteroatoms in the Conjugation Chain. XX. Synthesis of Polymeric Phthalocyanines and Investigation of their Basic Physicochemical Properties, by A. A. Berlin, L. G. Cherkashina, E. I. Balabanov, 12 pp.
RUSSIAN, per, Vysok Soed, Vol IV, No 3, 1962, pp 376-382. 9223014
Amer Meteorol Soc
T-R-431
- Studies of Chelate Polymers. V. Chelate Polymers of bis-Dithiocarbamic Acids and Metals, by A. P. Terent'yev, E. G. Rukhadze, et al, 12 pp.
RUSSIAN, per, Vysok Soed, Vol IV, No 6, 1962, pp 821-827. 9223020
Amer Meteorol Soc
T-R-432
- Electrophysical Properties of Polymeric Phthalocyanines, by E. I. Balabanov, E. L. Frankevich, et al, 11 pp.
RUSSIAN, per, Vysok Soed, Vol V, No 11, 1963, pp 1684-1690. 9223016
Amer Meteorol Soc
T-R-433
- Semiconductor Properties of Organic Dyes. II. Trypaflavine, by A. T. Vartanian, 14 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXIV, No 11, 1950, pp 1361-1370. 9223028
Amer Meteorol Soc
T-R-403
- The ScCl₃ - Sc System, by O. G. Polyachenok, G. I. Novikov.
RUSSIAN, per, Zhur Neorgan Khim, Vol VIII, 1963, pp 2819-2821.
AEC-IS-Tr-2

Scientific
Chemistry (Contd)

Removal of Radioactive Materials From Waxes, by A. S. Smirnov.
RUSSIAN, per, Zhur Vses Khim Obshch imeni Mendeleveva, Vol V, No 6, 1960, pp 651-670.
UKAEA-Risley

Catalytic Activity of Rare-Earth Compounds in Directed Polymerization, by Shen Chih-ch'uan, Kung Chung-yuan, et al, 6 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 335, 336.
JPRS 25656

P-Phenyl and Benzyl Phosphonic Ester, by Yuang Ch'eng-yeg, Yeh Wei-chen, et al, 8 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 337-340.
JPRS 25656

The Characteristics of Seismic Phases Pt and St, by Mei Shih-jung, 8 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 350-353.
JPRS 25656

Research on the Internal Consumption of $\text{Li}_2\text{O}-\text{K}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2$, by Li Chia-chih, Lo Chieh-yao, et al, 16 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 353-357.
JPRS 25656

Research on the Dual Characteristics of Acid Electron Catalysts, by Hsiao Kuang-yen, Liu Ch'un-yang, et al, 8 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 361-363.
JPRS 25656

Solubility Study of the Complex Formation Reactions of Thallous and Sulfo-Cyanic Acid Radicals at Different pH, by Chang Cheng-pin, Liu Lien-sheng, 11 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 435-438.
JPRS 25741

Study of Trivalent Rare Earth Oxides Beryllium Oxide System, by Kuo Chu-k'un, Yen Tung-sheng, 6 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 457-458.
JPRS 25741

The Crystalline Structure of the New Polytype 69R of Silicon Carbide, by Kuo Ch'ang-lin, 6 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 459-461.
JPRS 25741

Tb^{160} Decay Investigation of Excited Levels of Strongly Deformed Rare Earths, Part III, by Pei-kun Wung.
CHINESE, per, Wu Li Hsueh Pao, Vol XIX, 1963, pp 524-537.
*AEC

Hydrogen Absorption by Beryllium, by R. Blanchard, L. Bochirol.
FRENCH, rpt, Fifth Colloquium on Metallurgy, 1961, Saclay, 1962, pp 157-162.
*AEC

Pneumopathy Due to Cadmium Vapours, by P. Lamy.
FRENCH, per, Journal Francais de Medecine et Chirurgie Thoraciques, Vol XVII, 1963, pp 275-283.
*AEC

Experience at Marcoule in the Treatment of Irradiated Fuels by TBP, by C. Jouannoud, 40 pp.
GERMAN, rpt, Symposium on Aqueous Reprocessing Chemistry for Irradiated Fuels, 23-26 Apr 1963.
AEC-ORNL-Tr-91

Scientific
Chemistry (Contd)

Eurochemic Scheme for the Final Purification of Plutonium by Triethylamine, by G. Rolandi, E. Detilleux, et al, 26 pp.
GERMAN, rpt, Symposium on Aqueous Reprocessing Chemistry for Irradiated Fuels, 23-26 Apr 1963.
AEC-ORNL-Tr-78

Aqueous Reprocessing, by P. Regnaut, 27 pp.
GERMAN, rpt, Symposium on Aqueous Reprocessing Chemistry for Irradiated Fuels, 23-26 Apr 1963.
AEC-ORNL-Tr-73

Recent Progress in the Domain of Reprocessing by Volatilization, by J. Broothaerts, G. Camozzo, et al, 23 pp.
GERMAN, rpt, Symposium on Aqueous Reprocessing Chemistry for Irradiated Fuels, 23-26 Apr 1963.
AEC-ORNL-Tr-65

Dissolution of Zirconium in a Sodium Fluoride-Citric Acid Solution, by J. Van Caeneghem, Y. Marchant, et al, 22 pp.
GERMAN, rpt, Symposium on Aqueous Reprocessing Chemistry for Irradiated Fuels, 23-26 Apr 1963.
AEC-ORNL-Tr-62

TBP Chemical Extraction Scheme in the Eurochemic Plant, by E. Detilleux, A. Redon, et al, 35 pp.
GERMAN, rpt, Symposium on Aqueous Reprocessing Chemistry for Irradiated Fuels, 23-26 Apr 1963.
AEC-ORNL-Tr-61

Contribution to the Synthesis of Aminothiodiazoles and the Corresponding Sulphonamide Derivatives, by H. Wöjahn, H. Wuckel.
GERMAN, per, Archiv der Pharmazie, Vol LVI, No 2, 1951, pp 53-62.
*AEC

Carbonisation of Substances Simulating Pit Coal, by D. W. Van Krevelen, H. W. Den Hartog, 16 pp.
GERMAN, per, Brennstoff-Chemie, Vol XLII, 1961, pp 287-290.
AEC-NP-Tr-1127

Particle Size Distribution, by H. Rumph, K. F. Ebert.
GERMAN, per, Chemie Ingenieur Technik, No 5, 1964, p 36.
*AEC

Thin-Layer Electrophoresis and Its Application to the Separation of Phenols and Phenolic Acids, by G. Pastuska, H. Trinks, 13 pp.
GERMAN, per, Chemiker Zeitung, Vol LXXXV, 1961, pp 535-538.
AEC-SC-T-64-615

Investigations With the Aid of Thin-Layer Electrophoresis, by G. Pastuska, H. Trinks, 11 pp.
GERMAN, per, Chemiker Zeitung, Vol LXXXVI, 1962, pp 135-138.
AEC-SC-T-64-612

The Effect of Combustion Properties of Gases on the Yield of Light of the Incandescent Gas Light, by Karl Bunte, Horst Brueckner, 20 pp.
GERMAN, per, Gasund Wasserfach, Vol LXXXVII, 1944, pp 31-37.
AEC-AI-Tr-42

Concerning the Adsorption of Radon on Activated Charcoal and Silica-Gel, by O. Guebelli, K. Stambach, 9 pp.
GERMAN, per, Helvetica Chimica Acta, Vol XXXIV, 1951, pp 1257-1243.
AEC-SC-T-64-613

Scientific
Chemistry (Contd)

Concerning the Mixed Adsorption of Radon on Activated Charcoal With Various Carrier Gases, by O. Guebelli, M. Stoeri, 9 pp.
GERMAN, per, Helvetica Chimica Acta, Vol XXXVII, 1954, pp 2224-2230.
AEC-SC-T-64-616

Radiation Chemistry of Hydrocarbons. Part VI. Saturated Products in Hexane, by H. Widmer, T. Gaeumann.
GERMAN, per, Helvetica Chimica Acta, Vol XLVI, No 3, 1963, pp 944, 945.
*AEC

Radiation Chemistry of Hydrocarbons. Part VII. Iodine in Hexane, by H. Widmer, T. Gaeumann.
GERMAN, per, Helvetica Chimica Acta, Vol XLVI, No 7, 1963, pp 2766-2780.
*AEC

Radiation Chemistry of Hydrocarbons. Part IX. Benzene, by T. Gaeumann.
GERMAN, per, Helvetica Chimica Acta, Vol XLVI, No 7, 1963, pp 2873-2885.
*AEC

Radiation Chemistry of Hydrocarbons. Part X. Let Effects in Toluene, by J. Hoigne, W. G. Burns, et al.
GERMAN, per, Helvetica Chimica Acta, Vol XLVII, No 1, 1963, pp 247-259.
*AEC

Thin-Layer Chromatography. VI. Trace Analysis of Sugar Mixtures on Kieselguhr G Layers, by E. Stahl, H. Kaltenbach.
GERMAN, per, Journal of Chromatography, Vol V, 1961, pp 351-355.
*AERE-Harwell

Investigations on ⁸⁵Kr Bremsstrahlung Sources. Closed Sources V., by H. Schaefer, G. Vormum, et al.
GERMAN, per, Kernenergie, Vol VI, No 12, 1963, pp 704-710.
*AEC

Organic Silicon Compounds With Phenylene- and Thienylenechain Links, by T. I. Tschernyschewa, N. S. Nametkin, 7 pp.
GERMAN, per, Plaste und Kautschuk, Vol X, No 7, 1963, pp 390-391. 9693472
FTD-TT-64-165

Measurement of Spontaneous Activity Release of Tritium-Labelled Pigments and Colours, by W. Coenen.
GERMAN, per, Staub, Vol XXIII, No 9, 1963, pp 424-430.
*AEC

Thin-Layer Chromatography, by Egon Stahl, 15 pp.
GERMAN, per, Z fuer Analytische Chemie, Vol CLXXXI, 1961, pp 303-312.
AEC-SC-T-64-614

Saline Compounds and Intermetallic Phases of Sodium in Liquid Ammonia. First Report on Metals and Alloys, by E. Zintl, J. Goubeau, et al, 43 pp.
GERMAN, per, Z fuer Physikalische Chemie, Vol CLIVA, 1931, pp 1-46.
AEC-ANL-Tr-8

Application of Gas-Liquid Chromatography During the Production and Analysis of Detergent-Active Materials and Textile Assistants, by V. Vasilescu, 26 pp.
GERMAN, per, Z fuer Praktische Chemie, Vol XV, No 4, 1962, pp 192-205. 9222962
AEC-NP-Tr-1246

Scientific
Chemistry (Contd)

Preparation of Glucose-6-Phosphate Uniformly Labelled With ¹⁴C, by L. Loninotti, F. Pocchiari, 12 pp.
ITALIAN, per, Gazzetta Chimica Italiana, Vol LXXXIV, 1954, pp 1171-1176. 9222987
AEC-NP-Tr-1251

kinetics of the Dimethylformamide Synthesis From Carbon Monoxide and Dimethylaniline Under Pressure, by Keinchi Fukui, C. Sera.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol LXII, 1959, pp 945-950.
*Dept of Interior

The Application of the Infrared Absorption Spectroscopy to Chemical Industry, 19 pp.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol LXVI, No 11, 1963, pp 1543-1548.
JPRS 25356

The Problematic Points in the Infrared Absorption Spectroscopic Analytic Method, 20 pp.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol LXVI, No 11, 1963, pp 1549-1553.
JPRS 25356

Infrared Qualitative Analysis and the Collection of Spectral Data, 14 pp.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol LXVI, No 11, 1963, pp 1553-1559.
JPRS 25356

Gas Chromatography of Unesterified Lower Fatty Acids, by T. Nakae, T. Nakanishi.
JAPANESE, per, Nippon Nogei Kagaku Kaishi, Vol XXXVII, 1963, pp 302-305.
*Fisheries Res Bd of Canada

Studies on Cs-137 Metabolism and Injury, by Kazuhiko Mikota, 40 pp.
JAPANESE, per, Osaka Shiritsu Daigaku Igaku Zasshi, Vol VIII, 1959, pp 1335-1362.
AEC-ANL-Tr-6

The Radioprotective Substances - Concerning Chemical Protectors, by Akaboshi Sanya, 18 pp.
JAPANESE, per, Yakugaku Zasshi, Vol LXXXIII, No 11, 1963, pp 1005-1015.
JPRS 25633

α, α -Diphenyl- β -Picrylhydrazyl as Radical Scavenger, by Shigeru Kiriyaama, Toshiyuki Kasabo, 23 pp.
JAPANESE, per, Yuki Gosei Kagaku Kyokaiishi, Vol XV, 1957, pp 510-517. 9693354
DDC RSIC-214

The Potentiometric Control of Separation of Acids on Ion Exchange Columns, by Witold Czerwinski, 7 pp.
POLISH, per, Chemia Analityczna, Vol III, No 3, 4, 1958, pp 475-482.
OTS 61-11377
PL-480

The Influence of Galactomannan Gums on the Properties and Production of Filled Papers, by Elzbieta Hochauz, 12 pp.
POLISH, per, Przegląd Papierniczy, No 11, 12, 1959, pp 1-5.
OTS 61-11385
PL-480

Determination of Pentosans in Chemical Pulps, by Idalia Grobelny, Wilhelm Illukowicz, 6 pp.
POLISH, per, Przegląd Papierniczy, No 1, 1960, pp 1-3.
OTS 61-11382
PL-480

Influence of Temperature, Oxygen and Light on the Carotene Content in Green Forage While Drying, by Z. Wierzchowski, 21 pp.
POLISH, per, Roczniki Nauk Rolniczych, Vol LXIX, No 2, 1955, pp 163-190.
OTS 60-21575
PL-480

Scientific
Chemistry (Contd)

Alkaline Fusion of Unsaturated Fatty Acids, by
A. Vazquez Roncero.
SPANISH, per, Grasas y Aceites, Vol XIV, 1963,
pp 66-72.
Fisheries Res Bd of Canada

Scientific
Earth Sciences & Astronomy

Investigation of the Upper Layers of the
Atmosphere and Space, A Bibliography, 69 pp.
RUSSIAN, bk, Bibliograficheskiy Byulleten Issledovaniye
Verkhnikh Sloev Atmosfery i Kosmicheskogo
Prostranstva, No 2, 1964, pp 3-46. 9224182
NASA TT F-229

Hydrogeology of the Central Part of Southern
Yakutia, by N. A. Vel'mina, V. V. Uzemblo, 196 pp.
RUSSIAN, bk, Gidrogeologiya Tsentral'noi Chasti
Yuzhnoi Yakutii, 1959.
OTS 63-11131
PL-480

Data on Ice Conditions in the Seas of the USSR.
The Sea of Azov and the Black Sea, 62 pp.
RUSSIAN, bk, Gidrologicheskoye Upravleniye
SSSR, Vol I, p 34; Vol II, pp 36-37; Vol III, pp 44-46;
Vol IV, pp 47-48; Vol V, pp 46-50; Vol VI, pp 55-60;
Vol VII, pp 38-41; Vol VIII, pp 37-42, 1962.
Navy Tr 3836/HO 174

Investigation of the Upper Layers of the Atmosphere.
A Bibliography.
RUSSIAN, rpt, Issledovaniye Verkhnikh Sloev
Atmosfery i Kosmicheskogo Prostranstva, 1964.
*NASA TT F-229

On the Magnetotelluric Method of Investigation of the
Upper Portion of the Earth's Crust, by N. P. Vladimirov.
5 pp.
RUSSIAN, rpt, Papers From All Union Conference,
Apr 1961, pp 118-123.
Navy Tr 3850/ONI 1000-a

Microvariation Magnetic Station With A Passband
From 0.003 to 10 cps, by Yu. M. Egorov, 8 pp.
RUSSIAN, rpt, Papers From All Union Conference,
Apr 1961, pp 157-164.
Navy Tr 3851/ONI 1000-b

Certain Results of Aeroelectroprospecting by
the Method of a Rotating Magnetic Field, by
Yu. B. Shaub, 8 pp.
RUSSIAN, rpt, Papers From All Union Conference,
Apr 1961, pp 178-185.
Navy Tr 3852/ONI 1000-c

Absorption of Atmospheric Thermal Radiation
in the 9.6 μ Ozone Band Region, by K. Ya. Kondrat'yev,
Kh. Yu. Niylik, 27 pp.
RUSSIAN, bk, Problemy Fiziki Atmosfery, Sbornik 2,
Leningrad, 1963, pp 3-27. 9222833-V
NASA TT F-207

The Thermal Radiation of CO₂ in the Atmosphere
by K. Ya. Kondrat'yev, Kh. Yu. Niylik, 22 pp.
RUSSIAN, bk, Problemy Fiziki Atmosfery, Sbornik 2,
Leningrad, 1963, pp 28-47. 9222928
NASA TT F-208

Investigating the Spectral Distribution of Shortwave
radiation, by K. Ya. Kondrat'yev, et al, 20 pp.
RUSSIAN, bk, Problemy Fiziki Atmosfery, Sbornik 2,
Izdatel'stvo Leningrad, 1963, pp 67-86. 9222927
NASA TT F-213

Scientific
Earth Sciences & Astronomy (Contd)

The Infrared Absorption Spectrum of Water
in its Liquid State, by K. Ya. Kondrat'yev, et al, 27 pp.
RUSSIAN, bk, Problemy Fiziki Atmosfery,
Sbornik 2, Leningrad, 1963, pp 87-112. 9222896-V
NASA TT F-211

Proceedings of the All-Union Meteorological
Conference, by M. I. Budyko.
RUSSIAN, bk, Trudy Vsesoyuznogo Nauchnogo
Meteorologicheskogo Soveshchaniya, Leningrad,
1962, 187 pp.
NASA TT F-168

A Study of Rivers, by Boris Aleksandrovich Apollov.
(DC-10693)
RUSSIAN, bk, Ucheniye o Rekakh, Chapters VI-VIII;
XIII, 1963, pp 77-173; 257-272.
*JPRS

Investigation of Various Formations on Mars,
by N. P. Barabashov, 29 pp.
RUSSIAN, per, Astron Zhur, Vol XXIX, No 5,
1952, pp 538-555. 9223009
Amer Meteorol Soc
T-R-424

On the Problem of the Similarity Method of Integral
Relations, by V. V. Bobkov.
RUSSIAN, per, Dok Ak Nauk BSSR, Vol VIII, No 1,
1964, pp 5-9.
*NASA TT F-261

The International Oceanological Expedition in the
Indian Ocean, by N. N. Sysoyev, 17 pp.
RUSSIAN, per, Geofiz Byul, No 13, 1963, pp 18-28.
JPRS 25729

On the Refraction and Doppler Shift of Radiowaves
Radiated by Artificial Earth Satellites in a Three-
Dimensional Heterogeneous Ionosphere, by
Ya. L. Al'pert, 17 pp.
RUSSIAN, per, Geomagnetizm i Aeronomiya, Vol III,
No 4, 1963, pp 626-634. 9693222
FTD-TT-64-384

Some Properties of the Martian Atmosphere
Indicated by Spectrophotometric Observations
of 1956, by N. A. Kozyrev, 6 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Krymsk
Astrofiz Observat, No 18, 1958, pp 61-65. 9223007
Amer Meteorol Soc
T-R-429

Nuclear Processes in Chromospheric Flares,
by B. M. Vladimirovskiy, A. B. Severnyy, 9 pp.
RUSSIAN, per, Iz Krymskoy Astrofiz Observ, Vol XXIX,
1963, pp 80-85. 9221733
NASA TT F- 214

Results of Observations of Mars, by Yu. N. Lipskiy, 5 pp.
RUSSIAN, per, Priroda, Vol XLVI, No 4, 1957,
pp 105, 106. 9223017
Amer Meteorol Soc
T-R-427

One Means of More Effectively Using Seismic
Apparatus, by S. N. Kasparova, L. A. Yurkova, 5 pp.
RUSSIAN, per, Razvedoch i Prom Geofiz, No 48, 1963,
pp 87-91.
JPRS 25704

Nature of a Weak Chromospheric Flare, by
M. N. Stoyanova.
RUSSIAN, per, Solnechnyye Dannyye, No 3, 1963,
pp 46-54.
*NASA TT F-248

The Problem of Active Longitudes on the Sun,
by Yu. I. Vitinskiy.
RUSSIAN, per, Solnechnyye Dannyye, No 3, 1963,
pp 64-70.
*NASA TT F-249

Scientific
Earth Sciences & Astronomy (Contd)

- Nature and Localization of Chromospheric Flares,
by Yu. M. Slonim.
RUSSIAN, per, Solnechnyye Dannyye, No 4, 1963,
pp 67-77.
*NASA TT F-250
- On the Relationship Between Photospheric and
Chromospheric Processes in the Active Region During
Flares, by S. I. Gopasyuk, M. B. Ogir¹, et al.
RUSSIAN, per, Solnechnyye Dannyye, No 4, 1963,
pp 77-81.
*NASA TT F-251
- Actinometry, Atmospheric Optics and Nuclear
Meteorology, Selected Articles, by N. N. Gorokhovskaya,
et al, 120 pp.
RUSSIAN, per, Trudy Ak Nauk Litovskoy SSR,
Inst Geologii i Geogra Nauchnyye Soobshch, Vol XIII,
Vilnius, 1962. 922902-V
NASA TT F -150
- Device for Measuring the Size Spectrum of Spherical
Particles and Fog Droplets, by V. I. Golikov, 21 pp.
RUSSIAN, per, Trudy Glav Geofizi Obser, No 109,
1961, pp 76-89. 9223025
Amer Meteorol Soc
T-R-422
- Temperature Measurement of the Free Atmosphere
Taking Into Account the Recombination of Atoms,
by A. F. Chizhov, 12 pp.
RUSSIAN, per, Trudy Tsentral Aerolog Obser, No 46,
1963, pp 76-84. 9221732
NASA TT F -215
- Investigation of Cosmic Ray Intensity Fluctuations
in the Stratosphere Caused by Solar Processes,
by A. N. Charakhch'yan, 41 pp.
RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXXIII, No 1,
May 1964, pp 35-62.
JPRS 25641
- Preliminary Results of Observations of Mars,
by N. P. Barabashov, 6 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 5, 1957,
pp 34, 36. 9223010
Amer Meteorol Soc
T-R-426
- Climatic Change and Climate Control,
by M. I. Budyko, 7 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 7, 1962,
pp 33-37. 9223019
Amer Meteorol Soc
T-R-436
- Present-Day Problems of Radioastronomy.
8 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 2, 1964,
pp 13-16.
NLL Tr Bulletin
Vol VI, No 7, 1964
- Ice Cover of the Black Sea, by B. S. Shustov,
25 pp.
RUSSIAN, per, Zemlevedeniye, Vol XXXVI, No 4,
1934, pp 376-395.
Navy Tr 3857/HO 184
- The Petrological Character of Samarskitic Granite in
Nan Ling, by Wang Te-fu, 9 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1962,
pp 449-452.
JPRS 25741
- New Classification of Niobium Granite -- Discovery of
Samarskite Granite, by Ch'en Te-ch'ien, Ting Hsiao-shih,
et al, 8 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964,
pp 452-455.
JPRS 25741

Scientific
Earth Sciences & Astronomy (Contd)

- Hydrogeology, by J. B. Lamarck.
FRENCH, bk.
Univ of Ill Press
- Contribution to the Study of the Structure of the
Ionosphere, by Marcel Nicolet.
FRENCH, rpt, Brussels, 1945.
*NASA TT F-253
- Climates of the Past, by Martin Schwarzbach.
GERMAN, bk.
Van Nostrand
- A Hydrographic Extinction and Temperature
Measuring Apparatus, by H. Klein, D. Sonntag, 19 pp.
GERMAN, per, Acta Hydrophysica, Vol VIII,
No 1, 1963, pp 23-45.
Navy Tr 3855/ONI 997
- Perspective Maps, by Fritz Holzell, 35 pp.
GERMAN, per, Internationale Jahrbuch fuer
Kartographie, 1963, pp 100-115. (Call No GA101
I 62, 1963, Eng Tr)
Army Map Service
- New Methods of Medium Range Weather Forecasting,
by Eva Cheh Kalman, 7 pp.
HUNGARIAN, per, Ido-Jaras, Vol LXVII, No 6,
Nov 1963, pp 372-376.
JPRS 25509
- Biological-Chemical Protection From Radiation,
by Ferenc Toth, 15 pp.
HUNGARIAN, per, Magyar Radiologia, Vol XV, No 4,
1963, pp 193-200. 9693203
FTD-TT-64-163
- Practical Organization of Radiation Protection, by
Janos Barany, 14 pp.
HUNGARIAN, per, Magyar Radiologia, Vol XV, No 4,
1963, pp 208-214. 9693203
FTD-TT-64-163
- Permanent and Seasonal Frozen Ground in Mongolia,
by N. Lonjid, 56 pp.
MONGOLIAN, monograph, Mongol eryl Olon Jiliyn ba
Ulirlyn Tsebdglyn Tuhay, Ulan Bator, 1962, pp 1-77.
JPRS 25349
- River Regulation, by Wiktor Mamak, 380 pp.
POLISH, bk, Regulacja Rzek i Potokow, 1958,
415 pp.
OTS 61-31301
PL-480
- Some Microelements in Soils, by Arkadiusz Musierowicz,
24 pp.
POLISH, per, Roczniki Gleboznawcze, Vol IX,
1960, pp 3-25.
OTS 61-31323
PL-480
- Coordination of Geo-Topographic Works and Results
and Future Assignments, by C. Tudor, 13 pp.
RUMANIAN, per, Geodezie Organizarea Teritoriului,
Vol VIII, No 1, 1964, pp 9-16. (Call No QB275 R45
v 8 No 1, Eng Tr)
Army Map Service
- g-O: Current Problems in Bioastronautics, by
P. Octavian, D. Cristian, 11 pp.
RUMANIAN, per, Stinta si Tehnica, Vol XV, No 1,
1963, pp 19-21. 9693479
FTD-TT-64-556

**Scientific
Electronics**

Cathode Processes in the Mercury Arc, by
I. G. Kesayev.
RUSSIAN, bk.
Consultants Bureau

Thermoelectric Properties of Semiconductors,
by V. A. Kutasov.
RUSSIAN, bk.
Consultants Bureau

Crowe Super Conductive Memory Elements,
by R. A. Chentsov, 85 pp.
RUSSIAN, booklet, Elektronnyye Vychislitelnyye
Mashiny, Moscow, 1963, pp 1-87.
JPRS 25648

Radioelectronics and Space Medicine, by
I. T. Akulinichev, R. M. Bayevskiy, et al.
RUSSIAN, bk, Radioelektronika v Kosmicheskoy
Meditsine, Massovaya Radiobiblioteka, Moscow-
Leningrad, No 505, 1964, 48 pp.
*FTD-TT-64-836

Radioelectronics of Guided Missiles, by
P. T. Astasenkov, 215 pp.
RUSSIAN, bk, Radioelektronika Rizenykh Strel,
Vol XIII, 1962, pp 5-174. 9693503-V
FTD-TT-63-772

Fish Finding Sonar Paltus, by V. P. Averkiyev, 32 pp.
RUSSIAN, bk, Sudovyye Ryboposkovyye i Elektron
avigatsionnyye Priборы, Leningrad, Chapter VI, 1963,
pp 75-90.
JPRS 24635

Considering the Synthesis of Discrete Systems
by the Method of Polynomial Equations, by
M. R. Yelistratov, 23 pp.
RUSSIAN, per, Avtom i Telemekh, Vol XXIV, No 11,
1963, pp 1474-1486. 9693178
FTD-TT-64-333

Questionnaire Language and Abstract Synthesis
of Minimum Sequential Machines, by A. A. Tal'.
RUSSIAN, per, Avtomat i Telemekh, Vol XXV,
No 6, 1964, pp 946-962.
*NASA TT F-260

Behavior of Cathode Spots in a High-Current
Electric Discharge, by V. Grakov, V. Hermoch, 17 pp.
RUSSIAN, per, Chekhoslovatskiy Fiz Zhur, Vol XIII,
No 7, 1963, pp 509-517. 9693230
FTD-TT-64-152

Stabilization of the Motion of a Controlled Member
for a Control System With Time Relay,
by N. N. Krasovskiy, Yu. S. Osipov.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk
Tekh Kibernetika, No 6, 1963, pp 3-15.
*NASA TT F-256

Energy Spectra of Electrons Detachable in the
Photoionization of Molecules, by F. I. Vilesov,
B. L. Kurbatov, 11 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Seriya Fizicheskaya,
Vol XXVII, No 8, 1963, pp 1088-1093. 9693228
FTD-TT-64-296

Carrying Capacity of a Multipath System, by
I. A. Ovseyevich.
RUSSIAN, per, Problemy Peredachi Informatsii, No 14,
1963, pp 43-58.
*FTD-TT-64-807

Changes in Rules of Technical Operation of Soviet
Railroads, by Ye. V. Afanasyev, 7 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport,
No 2, 1964, pp 5-6. 9693478
FTD-TT-64-663

**Scientific
Electronics (Contd)**

The Question of Self-Teaching in the Perceptron,
by V. M. Glushkov, 17 pp.
RUSSIAN, per, Zhur, Vychisl Mate i Matemat Fiz,
Vol II, No 6, 1962, pp 1102-1110. 9693215
FTD-TT-64-299

Measurement of the Lifetime of Minority Current
Carriers in Semi-Conductors by Observing the
Photo-Conductive Decay of the Spreading Resistance
Under a Point Contact, by Shou-Su Wang.
CHINESE, per, Wu Li Hsueh Pao, Vol XIX, No 3,
1963.
*FTD-TT-64-830

A New Way of Coupling Two Complementary
Transistors, by Viktor Spany, 13 pp.
CZECH, per, Slaboproudny Obzor, No 12, 1961,
pp 671-674. 9222941
Emmanuel Coll Res Lang Ctr
E-T-Slovak-64-1

A Precision Transistor Switch for Analog-Digital
Converters, by V. Novak, 7 pp.
CZECH, per, Slaboproudny Obzor, No 4, 1963, pp 219-224.
ACSI I-4344
ID 2204008264

Use of a Digital Computer for Artificial Traffic Tests
of Communications Equipment, by Norbert Vanek, 13 pp.
CZECH, per, Slaboproudny Obzor, Vol XXIV, No 10,
1963, pp 602-606.
ACSI I-4821
ID 2204019364

Materials Utilizable in Optical Systems Working
in the Infrared, by P. Billard, 92 pp.
FRENCH, per, Acta Electronica, Vol VI, No 1,
1962, pp 7-66. 9692914
DDC RSIC-193

Research on the Polarization of Light From Planets
and From Some Terrestrial Substances, by B. Lyot,
144 pp.
FRENCH, per, Annales de l'Observatoire de Paris
Section de Meudon, Vol VIII, No 1, 1929, 161 pp.
922333-V
NASA TT F-187

Partial Reflections in the Atmosphere and Long-
Distance Propagation, by Francois Du Castel,
Pierre Misme, et al.
FRENCH, per, Annales des Telecommunications,
Vol XIII, No 7, 1958, pp 209-214. 9692812
DDC RSIC-166

Current-Limiting High-Speed Switches for Heavy-
Current Installations, by A. Erk, 20 pp.
GERMAN, per, Elektrotechnische Zeitschrift, Vol XIVb,
1962, pp 169-174.
AERE-Harwell-Tr-901

Noise Problems in Fans, Transformers and
Electric Motors, by M. J. Mattei.
GERMAN, per, Ingenieur Digest, Vol III, No 1,
1964, pp 46-48.
BISI 3748

On the Simulation of Differential Equations With an
Electronic Analog Computer, by H. Rudolph.
GERMAN, per, Messen Steuern Regeln, Vol VI,
No 12, 1963, pp 498-501.
BISI 3784

Statistical Analysis and the Use of Electronic
Analog Computers, by A. Sydow, H. Dittmann.
GERMAN, per, Messen Steuern Regeln, Vol VI,
No 12, 1963, pp 501-504.
BISI 3785

Scientific
Electronics (Contd)

A Contribution to the Theory of the Parametric Single-Diode Amplifier With One Auxiliary Circuit and Two Driving Stages, by Hermann Mahr, 16 pp. GERMAN, per, Nachrichtentechnische Zeitschrift, No 12, 1963, pp 630-634. 9693356 DDC RSIC-217

Two High-Power Neutron Generators for Impulse and Continuous Operation, by Werner Eyrich, 21 pp. GERMAN, per, Nukleonik, Vol IV, 1962, pp 167-174. AEC-ORNL-Tr-96

Physical Designs and Examples of Application of Frequency-Independent Antennas, by Hans-Joachim Fischer, 17 pp. GERMAN, per, Radio Und Fernsehen, Vol XII, No 18, 1963, pp 557-560. 9693517 FTD-TT-64-554

Calculating the Frequency Dependence of the Magnetic Resistance Change, by M.J.O. Strutt. GERMAN, per, Scientia Electrica, Vol IV, 1960, pp 153-172. *AEC

Mechanical Strength and Fire Checking Characteristics of High Efficiency Particulate Filters, by K. Mulcaister.

GERMAN, per, Straub, Vol XXIII, 1963, pp 64-69. *AEC

The Geometrical Effect on the Transverse Magneto-resistance of Rectangular Disks of Semiconductors, by Hans J. Lippman. GERMAN, per, Z fuer Naturforschung, Vol XIIIa, 1958, pp 462-474. *AEC

A New Microscope for Measuring Electron Diffraction Patterns, by P. Schwaab.

GERMAN, per, Z fuer Wissenschaftliche Mikroskopie und Mikroskopische Technik, Vol LXV, No 7, 1964, pp 430-433. BISI 3763

A New Electron Microscope Specimen Holder for the Examination of Metals by Transmission, by P. Schwaab, W. Steinmetz.

GERMAN, per, Z fuer Wissenschaftliche Mikroskopie, Vol LXV, No 7, 1964, pp 434-436. BISI 3764

The Auricular Electrocytogram, by G. Bohenszky, Z. Bokor, 13 pp.

HUNGARIAN, per, Orvosi Hetilap, Vol CIV, No 21, 1963, pp 981-984. 9693209 FTD-TT-64-271

Semiconductor Pulse Counter, by A. Ambrozjak. POLISH, per, Archiwum Elektrotechniki, Vol III, No 2, 1963, pp 363-381. Navy Tr 3861/APL T1037

Scientific
Engineering

The Actual Contact Area Between Touching Surfaces, by P. E. D'yachenko, et al. RUSSIAN, bk. Consultants Bureau

Filtration Flows in Heterogeneous Media, by M. I. Shvidler. RUSSIAN, bk. Consultants Bureau

Scientific
Engineering (Contd)

Hydraulics and Fundamentals of Gas Dynamics, by A. M. Mkhitarian, 227 pp.

RUSSIAN, bk, Gidravlika i Osnovy Gazodinamiki, 1959.

OTS 64-11024

NASA TT F-146

Standard DC Automatic Thermistor Bridge, by L. M. Zaks, 22 pp.

RUSSIAN, bk, Issledovaniya v Oblasti Radiotekhnicheskikh Izmereniy, Vol XLVIII, No 108, Moscow, 1960, pp 7-23. JPRS 25358

Analysis of the Errors of a Microcalorimeter With Circulating Liquid, by V. I. Pronenko, 24 pp. RUSSIAN, bk, Issledovaniya v Oblasti Radiotekhnicheskikh Izmereniy, Moscow, Vol XLVIII, No 108, 1960, pp 24-41. JPRS 25358

Design of Aircraft Gas-Turbine Engines, by A. V. Shtoda, S. P. Aleshchenko, 571 pp.

RUSSIAN, bk, Konstruktsiya Aviatsionnykh Gazoturbinnnykh Dvigatelay, Moscow, 1961, pp 3-411. 9693284-V

FTD-TT-63-405

Foundations of Pyrotechnics, by A. A. Shidlovskiy, 405 pp.

RUSSIAN, bk, Osnovy Pirotekhniki, Moscow, 1954, pp 3-284. 9693297 FTD-TT-63-758

Problems of Diffraction and Wave Propagation III, by E. M. Gyuninen. (NY-9334)

RUSSIAN, bk, Problemy Difraktsii i Rasprostraneniya Voln, Vol III, 1964, pp 5-221. *JPRS

Overall Dimensions and Conditions for Transporting Dimensionless Loads, by V. S. Bezruchko, Z. I. Goroza, 19 pp.

RUSSIAN, bk, Spravochnik Dorozhnogo Mastera, 1963, pp 44-60. 9693258

FTD-TT-64-621

Method for Calculating the Characteristics of an Induction Motor With Solid Rotor, by V. M. Kutsevalov, 12 pp.

RUSSIAN, per. 9222985 AEC-Tr-6400

High-Speed Bistable Stage With a Counting Input, by M. A. Arnitis, I. Ya. Bilinskiy, et al, 16 pp.

RUSSIAN, per, Iz Ak Nauk Latvyskov SSR, Ser Fiz-Tekh Nauk, No 1, 1964. JPRS 25764

Motion of a Body Supported on a Vibrating Conical Surface, by K. Ya. Mutsenek, M. I. Perets, 11 pp.

RUSSIAN, per, Iz Ak Nauk Latvyskov SSR, Ser Fiz-Tekh Nauk, No 1, 1964, pp 89-96. JPRS 25764

Optimum Observation in the Case of Extremal Regulation in the Presence of High Interference, by L. A. Rastrigin, 11 pp.

RUSSIAN, per, Iz Ak Nauk Latvyskov SSR, Ser Fiz-Tekh Nauk, No 1, 1964, pp 97-105. JPRS 25764

About Optimum Dropping of Load, by O. M. Golubentsev, V. D. Novikov, 11 pp.

RUSSIAN, per, Prikl Mekh, Vol X, No 1, 1964, pp 23-31. 9693190 FTD-TT-64-222

The Effect of Mismatches on the Characteristics of an O-Type Backward-Wave Generator, by L. V. Kasatkin, G. N. Rapoport, 19 pp.

RUSSIAN, per, Radio i Elek, Vol VIII, No 9, 1963, pp 1577-1586. 9693218 FTD-TT-64-293

**Scientific
Engineering (Contd)**

Study of Heat Emission During the Condensation of Moving Steam in a Horizontal Pipe, by L. D. Berman, Yu. A. Tumanov, 17 pp.

RUSSIAN, per, Teploenergetika, Vol IX, No 10, 1962, pp 77-83. 9693249
FTD-TT-64-301

Thermal Barrier With Turbulent Boundary Layer of Gas, by S. S. Kutateladze, A. I. Leont'yev, 19 pp.

RUSSIAN, per, Teplofizika Vysokikh Temperatur, Vol I, No 2, 1963, pp 281-290. 9693221
FTD-TT-64-332

Six-Component Wind-Tunnel Balance, by N. P. Levitakiy, 7 pp.

RUSSIAN, Patent, No 152117, (Appl No 755147/26-10, Dec 12, 1961, pp 1-4. 9693244
FTD-TT-64-46

On the Cluster Expansion Method in Quantum Statistical Mechanics, by Tour Yung.

CHINESE, per, Acta Physica Sinica, Vol XX, 1964, pp 174-183.
*AEC

Conference on the Manufacture of Blades Part II. Production of Blades by Casting and Shaping, 103 pp.

CZECH, bk, Konference o Vyrobu Lopatek. II. Cast Vyroba Lopatek Odlevanim a Tvarenim. Zpravodaj Vzu, Vyzkumny a Zkusebni Lerecky Ustav, No 2(38), 1963, pp 65-104. 9693347
FTD-TT-64-305

Problem of Thermionic Conversion of Heat Into Electricity, by Jaroslav Kramar, 19 pp.

CZECH, per, Elektrotechnicky Ohzor, Vol LII, No 10, 1963, pp 513-518. 9693229
FTD-TT-64-528

Effect of Preliminary Treatment of Metal Surfaces on the Structure of Phosphate Coatings, by W. Machu.

FRENCH, per, Industrie Chimique Belge, No 3, 1963, pp 277-286.
*BISI 3803

Thermal Testing in Vacuum Applied to the Measurement of Austenitic Grain Size in Steel, by M. T. Leger, P. Detrez.

FRENCH, per, Memoires Scientifiques de la Revue de Metallurgie, Vol LX, Jul-Aug 1963, pp 513-530.
BISI 3571

Principles of Vacuum Stream Degassing, by H. Maas.

FRENCH, per, Revue de Metallurgie, Vol LX, No 5, 1963, pp 421-425.
BISI 3792

Graphical Analysis of Maximum Output of the Blast Furnace at Low Blast Temperatures, by A. Rist, N. Meysson.

FRENCH, per, Revue de Metallurgie, Vol LXI, No 2, 1964, pp 121-145.
*BISI 3809

Thermodynamic Study of the Deoxidation of Steel, by R. Scimar.

FRENCH, per, Revue Universelle des Mines, Vol CVI, No 10, 1963, pp 403-418.
BISI 3595

Pelletization of Minette Iron Ore and Its Roasting in a Rotary Furnace, by A. Bragard, P. Parmentier.

FRENCH, per, Revue Universelle des Mines, No 4, 1964, pp 1-8.
BISI 3704

Safety Measures for Exhaust Ventilation Equipment in Light Metal Processing Plants, by A. Von Schulte.

GERMAN, per, Arbeitsschutz, No 3, 1963, pp 69-72.
*AEC

**Scientific
Engineering (Contd)**

Derivation, Synthesis and Calculating Processes for a Mathematical Model of a Blast Furnace, Part II, by R. Wartmann.

GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXV, No 1, 1964, pp 15-20.
BISI 3675

The Influence of Deformation, Final Rolling Temperature, Cooling Conditions and Heat Treatment on the Mechanical Properties of Hot Rolled Heavy Plate, by M. Hanke.

GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXIII, No 4, 1962, pp 211-276.
BISI 3760

Development, Design and Calculation Processes of a Mathematical Model of the Blast Furnace, Part V, by R. Wartmann.

GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXV, No 4, 1964, pp 373-380.
BISI 3755

The Historical Development of Shearing Classifiers, by R. O. Riedel.

GERMAN, per, Aufbereitungs-Technik, Vol IV, No 11, 1963, pp 507-510.
BISI 3635

Investigations on the Problem of Life of Ingot Moulds, Part I, by H. Trenkler, A. Czech.

GERMAN, per, Berg-Hüttenmannische Monatshefte, Vol CVII, 1962, pp 313-323.
*BISI 3817

Characteristics of Hardness Determinations Using Different Indentors and Applied Loads, by W. Schmidt.

GERMAN, per, DEW Technische Berichte, Vol III, No 4, 1963, pp 136-149.
BISI 3713

Cold Hobbing as a Means of Making Dies for Cold Forming, by W. Haufe.

GERMAN, per, Draht, Vol XIV, No 8, 1963, pp 470-477.
BISI 3603

The Strength of Axially Symmetrical Shells, by J. Geckeler.

GERMAN, per, Forschungsarbeiten auf dem Gebiete des Ingenieurwesens, No 276, 1926, pp 1-52. 9693104
DDC RSIC-170

The Most Favorable Shapes for the Transitions on Shouldered Shafts, etc., by A. Thum, W. Bautz, 11 pp.

GERMAN, per, Forschung auf dem Gebiete des Ingenieurwesens, Vol VI, No 6, 1935, pp 269-273.
9693349
DDC RSIC-212

Complete Determination of the Planar Stress Condition by the Axial Pattern Method, by R. Hiltcher, 13 pp.

GERMAN, per, Forschung auf dem Gebiete des Ingenieurwesens, Verein Deutscher Ingenieure, Vol XV, No 1, 1944, pp 12-17. 9692931
DDC RSIC-180

On the Pressure Loss in Vent Pipes With Built-In Installations, by E. Hubner, 47 pp.

GERMAN, per, Forschung auf dem Gebiete des Ingenieurwesens, Vol XIX, No 1, 1953, pp 1-16. 9693348
DDC RSIC-211

Determination of Retained Austenite in Case Hardened Steels by X-Ray Analysis, by G. Bierwirth.

GERMAN, per, Materialprüfung, No 6, 1961, pp 228-233.
*BISI 3805

Scientific
Engineering (Contd)

Mathematical Statistics Used in Evaluating Optimum Quantities Affecting the Output of Open-Hearth Furnaces, Part II, by K. Müller, K. Kohler.
GERMAN, per, Neue Huette, Vol VIII, No 3, 1963, pp 160-171.
BISI 3570

Methods of Gas Determination in Metals, by R. Kern.
GERMAN, per, Physik der Kondensierten Materie, Vol I, No 2, 1963, pp 105-124.
BISI 3574

Formation, Origin and Physical Control of the Structure of Cast Metals, by O. Schaeber.
GERMAN, per, Radex Rundschau, No 1, Feb 1964, pp 20-41.
BISI 3738

Purely Optical Method for Determining Internal Stresses Occurring in Structures, by Henry Favre.
GERMAN, per, Schweizerische Bauzeitung, Vol XC, No 23, 1927, pp 291-294. 9692934
DDC RSIC-189

Static Loading of Converters and Pig Iron Mixers, by G. Buchholz, G. Hack.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 536-541.
*BISI 3808

Investigation Into the Cleaning of Brown Converter Fume by a New Electrostatic Process, by R. Flossmann, A. Schutz.
GERMAN, per, Staub, Vol XXXIII, No 10, 1963, pp 443-451.
*BISI 3810

The Formation of Slag in the Basic Open-Hearth Process, by G. Tromel, E. Gori.
GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 1035-1051.
BISI 3583

The Flame Scarfing of Slab for the Manufacture of Sheet and Strip With the Highest Surface Qualities, by H. Kreultsch.
GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 1348-1356.
BISI 3508

The Effect of the Sheet Material and Galvanizing Conditions on the Properties of Galvanized Sheet and Strip, by D. Horstmann.
GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 1467-1477.
BISI 3579

The Electrotechnical Characteristics of a New Cold-Rolling Tandem Train, by F. Claussen, G. Gleissner.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 389-403.
BISI 3723

Operating Measurements on a Four-High Reversing Stand for Cold Rolling Wide Strip, Part I, by F. Lindemann, O. Pawelski.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 403-410.
BISI 3724

Hardness Measurement on Spherical Surfaces by the Vickers Method, by W. Prigge.
GERMAN, per, Vereines Deutscher Ingenieure-Berichte, No 41, 1961, pp 51-55.
*BISI 3807

Torsion of Round Shafts With Variable Diameter, by Rudolf Sonntag.
GERMAN, per, Z fuer Angewandte Mathematik und Mechanik, Vol IX, No 1, 1929, pp 1-22.
9692810
DDC RSIC-179

Scientific
Engineering (Contd)

On the Problem of the Shape Factor, by A. Thum, W. Bantz, 13 pp.
GERMAN, per, Z des Vereins Deutscher Ingenieure, Vol LXXIX, No 43, 1935, pp 1303-1306. 9693350
DDC RSIC-213

Blanking of Silicon Steel Sheets, by C. S. Wukusick.
ITALIAN, per, Macchine, No 4, 1963, pp 481-487.
*BISI 3802

Research on the Photoelectric Determination of Stresses Due to the Dead Weight in Plane Structures, by P. Locatelli, G. Grandori, et al.
ITALIAN, per, La Ricerca Scientifica, Vol XXV, No 1, 1955, pp 80-91. 9692808
DDC RSIC-176

Investigations Relating to Aluminium Coated Steel Sheet and the Changes of the Coating When Exposed to High Temperatures, by T. Saga, O. Miyakawa.
JAPANESE, rpt, Tokyo Metropolitan University, Memoirs of Faculty of Technology, No 12, 1962, pp 1-8.
*BISI 3804

Contact Thermal Resistance, by Konomo Sonokama, 33 pp.
JAPANESE, per, Journal of the Japan Society of Mechanical Engineers, Vol LXIV, No 505, 1961, pp 240-250. 9693355
DDC RSIC-215

About a Certain Method of Investigating Combustion Chambers, by R. Szymanik, R. Staniszewski, 11 pp.
POLISH, per, Archiwum Budowy Maszyn, Vol X, No 3, 1963, pp 239-247. 9693225
FTD-TT-64-616

Cement Clay Drain Pipes, by Leopold Lipowski, 26 pp.
POLISH, per, Gospodarka Wodna, Vol XIX, No 8, 1958, pp 342-347.
OTS 61-31300
PL-480

Optimum Thrust-Control Regimes for Certain Rockets, by P. Bradeanu, I. Pavaloiu, 17 pp.
RUMANIAN, per, Studi si Cercetari de Mecanica, Vol XIV, No 4, 1963, pp 805-816. 9693480
FTD-TT-64-615

The Expansion of Oxelosund Ironworks, by C. Sehardt.
SWEDISH, per, Jernkontorets Annaler, Vol CXLV, No 8, 1961, pp 487-550.
BISI 2553

Scientific
Materials & Metallurgy

The Structure of Glass. Vol III. Catalyzed Crystallization of Glass, by E. A. Porai-Koshits.
RUSSIAN, bk.
Consultants Bureau

Analysis of High-Melting Compounds, by G. V. Samsonovym, A. T. Pilipenko, 325 pp.
RUSSIAN, bk, Analiz Tugoplavikh Svedineniy, Moscow, 1962, pp 7-256. 9693344
FTD-TT-63-814

Electroslag Casting and Its Prospective Use in Foundry Production, by B. Ye. Paton, B. I. Medovar, et al, 13 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 141-146.
JPRS 25337

**Scientific
Materials & Metallurgy (Contd)**

- Investigation of the Properties of Highly Weldable Castings of High-Strength Steels, by B. B. Gulyayev, et al, 8 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 147-152.
JPRS 25537
- Mechanical Properties of Cast Low-Alloy Manganese Steel, by V. N. Polissadov, 7 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 158-162.
JPRS 25537
- Effect of Technological Factors on Property Increase of Cast Stainless Nonmagnetic Steel, by O. N. Magnitskiy, 8 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 172-176.
JPRS 25537
- Effect of Casting Mold on the Mechanical Properties of Refractory Metals, by A. A. Demidova, B. B. Gulyayev, 9 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 217-222.
JPRS 25537
- Influence of Technological Processes on the Properties of Refractory Metals in Castings, by E. Ya. Kukkonen, et al, 10 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 223-228.
JPRS 25537
- Investigation of the Physical-Mechanical Properties of Iron and Nickel Based Alloys, by V. M. Stepanov, V. M. Korolev, 10 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 229-234.
JPRS 25537
- Effect of Cerium on the Mechanical Properties of Cast Heat-Resistant 15KhMIFL Steel, by N. S. Kreshchanovskiy, V. R. Nazarenko, 8 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 235-238.
JPRS 25537
- Influence of Technological Factors on the Mechanical Properties of Heat-Resistant Steel Not Containing Nickel, by I. M. Yazovskikh, I. M. Gorbachev, 11 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 239-245.
JPRS 25537
- Cast Heat-Resistant Steel for Blade Assemblies of Turbocompressors, by V. M. Kulayev, 5 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 246-248.
JPRS 25537
- Mechanical Properties of High-Alloy Steels at Normal and Increased Temperatures, by I. I. Goryunov, 12 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 249-258.
JPRS 25537
- Mechanical Properties of Aluminum-Magnesium Alloys, by M. F. Nikitina, 10 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 265-270.
JPRS 25537
- Al158K Secondary Aluminum Alloys for Pressure Casting, by Ye. A. Lebedev, 6 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 271-274.
JPRS 25537

**Scientific
Materials & Metallurgy (Contd)**

- Effect of Vibration on the Properties of Cast Metal, by G. F. Balandin, Yu. P. Yakovlev, 7 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 287-291.
JPRS 25537
- Increasing the Strength of ML5 Alloy Castings by Changing the Heat-Treatment Regime, by B. B. Tarnetskiy, 12 pp.
RUSSIAN, bk, Mekhanicheskiye Svoystva Litogo Metalla, 1963, pp 292-296.
JPRS 25537
- Effect on the Organism of Difficulty-Soluble Uranium Compounds During Inhalation, by A. P. Novikova, M. G. Tikhaya, 29 pp.
RUSSIAN, rpt, Proceedings of the Symposium on Radiological Health Safety Mining Milling of Nuclear Materials, Vienna, 1963, Vol I, 1964, pp 291-305.
AEC-ORNL-Tr-26
- Thermodynamic Characteristics of Interaction Between Carbon and Oxygen in Molten Iron, by Hsu Tseng-Chi, A. Yu. Polyakov.
RUSSIAN, rpt, Proceedings of Third Conference on the Use of Vacuum in Metallurgy, 1963, pp 3-9.
BSI 3743
- Heat Release From High-Activity Solid Substances in Relation to the Problem of Their Burial and Use, by P. V. Zimakov, et al.
RUSSIAN, rpt, Symposium on the Treatment and Storage of High-Level Radioactive Wastes, Vienna, 1962, 1963, pp 543-552.
*AEC
- Theoretical Bases of Chemical Heat Treatment of Steel, by A. A. Popov, 140 pp.
RUSSIAN, bk, Teoreticheskiye Osnovy Khimiko-Termicheskoy Obrabotki Stali, Sverdlovsk, 1962, 120 pp.
JPRS 25521
- Influence of the Type and Polarity of the Current on Metallurgical Processes During Electro-slag Welding, by D. A. Dudko, I. N. Rublevskiy.
RUSSIAN, per, Avtomaticheskaya Svarka, No 3, 1958, pp 69-78.
BSI 3780
- Changes in Slag Composition During a Process of Electro-Slag Welding, by D. A. Dudko, I. N. Rublevskiy.
RUSSIAN, per, Avtomaticheskaya Svarka, No 6, 1958, pp 51-55.
BSI 3779
- Electroslag Welding of Forgings of Alloy VT6, by V. P. Didkovskiy, V. F. Grabin, et al, 9 pp.
RUSSIAN, per, Avtomat Svarka, No 2, 1964, pp 54-58.
JPRS 25757
- Electroslag Welding of Low-Alloy Steel 16GS(3N) With a Thickness of 50-140 mm, by S. V. Yunger, G. N. Gorkunenko, 9 pp.
RUSSIAN, per, Avtomat Svarka, No 2, 1964, pp 67-71.
JPRS 25757
- Behavior of Drop and Surface of the Molten Bath in Electroslag Remelting, by V. V. Panin, B. B. Borovskiy, 5 pp.
RUSSIAN, per, Avtomat Svarka, No 2, 1964, pp 72-74.
JPRS 25757
- Guarantee of Precise Dimensions of Cylindrical Parts in Electroslag Welding, by I. I. Sushchuk-Siyusarenko, V. M. Khrundzhe, 7 pp.
RUSSIAN, per, Avtomat Svarka, No 2, 1964, pp 77-80.
JPRS 25757

Scientific
Materials & Metallurgy (Conrd)

The Texture of Electro Deposited Tin, by
N. Pangarov, V. Mikhaylova.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLIII,
No 5, 1963, pp 1119-1121.
*BISI 3806

An Experimental Induction Pump for Liquid Cast
Iron, by L. A. Verte.
RUSSIAN, per, Elektrichestvo, No 12, 1963,
pp 63-66.
BISI 3613

Investigation of Energy Distribution of Products of
Cathode Sputtering of Metals by Mercury Ions, by
M. B. Ben'yaminovich, V. I. Veksler, 17 pp.
RUSSIAN, per, Iz Ak Nauk Uzbek SSR, Seriya Fiziko-
Mate Nauk, No 3, 1963, pp 29-36. 9693343
FTD-TT-64-542

Investigation of the Secondary Ion Emission During
the Bombardment of Metals by Low-Energy Ions,
by D. D. Gruich, N. Rakhimbayeva, 15 pp.
RUSSIAN, per, Iz Ak Nauk Uzbek SSR, Seriya Fiz-
Mate Nauk, No 1, 1964, pp 53-60. 9693309
FTD-TT-64-544

The Recrystallization of 40Kh Steel Under Deformation,
by V. P. Severdenko, P. P. Ankut.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chern Metal,
No 3, 1964, pp 148-153.
BISI 3673

Mechanism of the Reduction of Iron Oxides,
by E. S. Vorontsov.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chern
Metal, No 2, 1964, pp 13-18.
BISI 3721

The Structure of Iron-Aluminium Alloys, by
F. L. Edel'man, L. I. Tushinsky.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chern
Metal, No 2, 1964, pp 131-139.
BISI 3722

An Algorithm for Use With Digital Process-Control
Computers for Determining the Time at Which Blow-Out
Should Stop When a Given Carbon Content is Reached in
a Bessemer Converter. Report 1, by K. S. Garger,
B. V. Lyaudis, et al, 8 pp.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Chern Metall,
No 3, 1964, pp 47-52.
JPRS 25762

Tests to Improve the Technique of Melting and
Casting Steel for Tubes, by Yu. E. Bembinek.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chern
Metal, No 4, 1964, pp 48-55.
*BISI 3813

Various Methods for Reducing the Head Piece in
Casting and Their Effect on the Quality of Killed
Steel, by V. N. Kirsanov, V. S. Kononov.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chern
Metal, No 4, 1964, pp 56-61.
*BISI 3814

Production and Dielectric Properties of Single
Crystals of Solid Solutions of Pb (TiO₃-ZrO₃), Lead
Metaniobate and Lead Titanate, by A. L. Khodakov,
M. L. Sholokhov, 11 pp.
RUSSIAN, per, Iz Vyssh Ucheb Zaved, Fizika,
No 2, 1961, pp 85-91. 9693219
FTD-TT-64-320

Use of a Computer for Calculating Chemical Composi-
tion of Iron Being Poured From a Mixer Into a Con-
verter, by K. S. Garger, I. V. Sergiyenko, et al, 5 pp.
RUSSIAN, per, Metal i Gornorud Prom, No 2,
Mar, Apr 1964, pp 24-26.
JPRS 25524

Scientific
Materials & Metallurgy (Conrd)

Glass Plastics in Furniture and Decoration and Uses
of Plasticized Wood, by P. Pooka, 5 pp.
RUSSIAN, per, Nauka i Tekh, No 4, 1964, pp 24-26.
JPRS 25574

Optimum Quantity of Air for Sintering, by
I. I. Rovenskiy.
RUSSIAN, per, Obogashchenie Roud, Vol VII,
No 4, 1962, pp 30-32.
BISI 3503

Some Methods for the Evaluation of Plastic Lining
Materials in Relation to Aggressive Liquids,
by N. S. Tikhomirova, K. I. Zernova, et al, 11 pp.
RUSSIAN, per, Plasticheskiye Massy, No 12, 1962,
pp 40-45.
AEC-ANL-Tr-15

Newly Formed Clay Minerals in Soils, by
E. A. Yariilova, E. I. Parfenova, 16 pp.
RUSSIAN, per, Pochvovedenie, No 9, 1957, pp 37-48.
OTS 63-11080
PL-480

The Dissolution of Zinc in Alkalies, by V. I. Rodionova.
RUSSIAN, per, Uchenyye Zapiski Moskov Gosudar
Pedagog Institut imeni V. I. Lenina, Vol XCIX, 1957,
6 pp.
*NASA TT F-252

Analysis of Creep in Orthotropic Fiberglass, by
M. A. Koltunov, V. N. Bezukhov, 11 pp.
RUSSIAN, per, Vest Moskov Univer, Seriya I,
Mate Mekh, No 6, 1963, pp 64-70. 9693181
FTD-TT-64-372

Preparation and Properties of Some Rare-Earth
Titanates, by Chang Hui-min, 8 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 5, 1964,
pp 54-57.
JPRS 25530

Some Distribution Characteristics of Selenium
and Tellurium in Pure Pyrite Ore Deposits,
by Liu Ying-chun, Chu Ping-ch'iu, et al, 6 pp.
CHINESE, per, K'uo-hsueh T'ung-pao, No 4,
1964, pp 346-348.
JPRS 25656

Preparation of Molybdenum Single Crystals by
Electron-Beam Floating-Zone Melting, by
Nai-pen Ming, Ts'un-yi Fan, 11 pp.
CHINESE, per, Wu Li Hsueh Pao, Vol XIX, No 3,
1963, pp 160-164. 9693289
FTD-TT-64-350

Cleaning Steel by Scarfing, by J. Kostkuba.
CZECH, per, Hutník, Vol XII, No 7, 1962,
pp 339-347.
BISI 3742

Two Hundred and Fifty Years of the Glassworks at
Harrachov, by M. Pulpitel, 13 pp.
CZECH, per, Sklár a Keramik, Vol XII, 1962,
pp 193-195. 9224325
AEC-NP-Tr-1149

Study of the Trapping of Iodine by Activated Charcoal,
by F. Billard, G. Chevalier, et al.
FRENCH, rpt, Etude de L'Arret de L'Iode par les
Charbons Actifs, 1962.
*AEC

The Effect of UO₂ and Other Oxides on the Sintering
Recrystallization and Creep of Beryllium Oxide,
by I. V. Shiskov.
FRENCH, rpt, New Nuclear Materials Including
Non-Metallic Fuels, Vol I, 1963, pp 225-243.
*AEC

Scientific
Materials & Metallurgy (Contd)

Impregnation of Graphite With Silicon in a Vacuum, by V. E. Ivanov.

FRENCH, rpt, New Nuclear Materials Including Non-Metallic Fuels, Vol I, 1963, pp 401-408.

*AEC

The Fritting of Pure Oxides With Additions, by R. Pampuch, 21 pp.

FRENCH, per, Bulletin Societe Francaise de Ceramique, No 46, 1960, pp 3-11.

AEC-UCRL-Tr-1042(L)

Study of the Blast Furnace, Part I, by J. Michard.

FRENCH, per, Centre d'Etude Superieures de la Siderurgie, 1959, pp 7-13.

BISI 3280

Variations of Resistivity in Irradiated Uranium at Low Temperatures, by Y. Quere.

FRENCH, per, Journal of Nuclear Materials, Vol IX, 1963, pp 290-308.

*AEC

Reduction of an Iron Oxide Bed With a Gas, Part I, by A. Rist, G. Bonnard.

FRENCH, per, Revue de Metallurgie, Vol LX, No 1, 1963, pp 23-37.

BISI 3679

New Method for Rapid Determination of Gas in Metals, by Th. Kraus, O. Winkler.

FRENCH, per, Revue de Metallurgie, Vol LXI, No 1, 1964, pp 87-91.

*BISI 3811

Problems Raised by Automation in Oxygen Steel Production, by P. Cesselin, P. Vayssiere.

FRENCH, per, Revue de Metallurgie, Vol LXI, No 3, 1964, pp 281-296.

*BISI 3816

Development of a High-Strength Stress-Corrosion-Resistant Alloy With an AlZnMg Base, Part II, by W. Rosenkranz.

GERMAN, per, Aluminium, Vol XXXIX, No 12, 1963, pp 741-752. 9692811

DDC RSIC-177

Comparison Between Different Methods of Establishing the Hydrogen Content of Liquid Steel, by H. Zitter, W. Schwarz.

GERMAN, per, Archiv fuer Eisenhuettenwesen, Vol XXXV, No 2, 1964, pp 109-114.

BISI 3678

The Sieve Bend-Influence of the Width of the Slots and the Viscosity of the Feed Upon the Feeding Rate - Industrial Applications, by F. J. Fontein.

GERMAN, per, Aufbereitungs-Technik, Vol IV, No 11, 1963, pp 511-513.

BISI 3636

On the Softening Behaviour of Coals of Various Ranks, by G. Juranek, B. Bussmann.

GERMAN, per, Brennstoff-Chemie, Vol XLIV, No 4, 1963, pp 97-104.

BISI 3694

Investigations on the Abrasion of Plastics and Metglas, by H. Brauer, E. Kriegel.

GERMAN, per, Chemie-Ingenieur-Technik, Vol XXXV, 1963, pp 697-707.

*BISI 3815

The Technical Manufacture of Calcium Metal. I. Electrolytic Processes, by Guenther Wehner, 25 pp.

GERMAN, per, Freiberger Forschungshfte, Vol XVIIb, 1956, pp 18-33.

AEC-NP-Tr-1130

Scientific
Materials & Metallurgy (Contd)

Transition From Plastic to Brittle Behavior in Thin Tungsten Wires, by W. Schilling, H. Paschedag, 9 pp.

GERMAN, per, Metallwissenschaft und Technik, Vol XIV, No 1, 1960, pp 23-25. 9692933

DDC RSIC-188

Metallurgical Aspects of Modern Developments in Tool Steels, by H. Briefs.

GERMAN, per, Schweizer Archiv, Vol XXIX, No 12, 1963, pp 413-427.

BISI 3689

Planning, Erection and Operational Results of a New Semi-Continuous Medium-Gauge Rolling Mill, by F. Koters.

GERMAN, per, Stahl und Eisen, Vol LXXXII, 1962, pp 77-90.

BISI 3647

Sinter Production and Properties, by G. Schwabe, H. Rellermeyer.

GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 327-347.

BISI 3717

New Special Reagent and a New Method for Determining Antimony, by Fritz Feigl, 10 pp.

GERMAN, per, Z fuer Analytische Chemie, Vol LXIV, 1924, pp 41-47.

AEC-UCRL-Tr-1011(L)

Electrochemical Studies on Solid Metal Alloys, by A. Oelander.

GERMAN, per, Z fuer Metallkunde, Vol XXIX, No 11, 1937, pp 361-366.

*AEC

Microfractographic Observations on Sintered Uranium Oxide, by A. Bassi, G. Camona, et al, 20 pp.

ITALIAN, per, Energia Nucleare, No 9, 1962, pp 513-528.

AERE-Harwell-Tr-996

Fluorescent X-Ray Analysis of Steels, by T. Adachi, M. Ito.

JAPANESE, per, Denki Seiko, Vol XXXIV, No 5, 1963, pp 384-392.

*BISI 3812

The S-Curve of Molybdenum Nickel Cast Iron Containing Nodular Graphite, by Y. Tokunaga.

JAPANESE, per, Imono, Vol XXXIII, No 3, 1961, pp 190-201.

BISI 3652

Studies of the Stability of Natural Rubber. I. Formation of a Network Structure in Natural Rubber. II. Relation Between Network and Tensile Strength, by K. Tatebayashi, T. Endo, 25 pp.

JAPANESE, per, Nippon Gomu Kyokaishi, Vol XXIV, 1951, pp 130-138.

AEC-SC-T-64-610

Lithium Tetraborate, by H. Gode, 10 pp.

LATVIAN, per, Latvijas PSR Zinatnu Akademijas Vestis, Vol XX, No 3, 1949, pp 91-96. 9222963

AWRE-Tr-43

Problem of Processing of Fines in the Polish Coal Industry, by Tadeusz Laskowski, 62 pp.

POLISH, per, Biuletyn Instytutu Naukowo-Badawczego Przemyslu Węglowego, No 23, 1948, pp 1-82.

OTS 60-21291

PL-480

Elaboration of Assortments of Threads Made of Polish Flax for Sewing Jute Shoes, by Zdzislaw Probulski, 17 pp.

POLISH, per, Prace Instytutu Przemyslu Włókien Lkowych, Vol VI, 1958, pp 91-105.

OTS 61-31269

PL-480

Scientific
Materials & Metallurgy (Contd)

Studies on Zinc-Iron Alloy Catalysts in Cyclohexanol to Cyclohexanone Dehydrogenation Reaction.
1. The Effect of the Cooling on Structure and Catalytic Activity, by E. Treszczanowicz, 11 pp.
POLISH, per, Przemysl Chemiczny, Vol XIII, No 8, 1957, pp 445-449.
OTS 61-31284
PL-480

Scientific
Mathematics & Data Processing

Application of Tunnel Diodes in High Speed Computers, by G. F. Drobyshev, V. V. Rikitin, 29 pp.
RUSSIAN, mono, Elektronnyye Vychislitel'nyye Mashiny, Moscow, 1963, pp 1-41.
JPRS 25368

Ferrite Cores for Memory Devices, by Yu. I. Vizun, 27 pp.
RUSSIAN, bk, Elektronnyye Vychislitel'nyye Mashiny, Moscow, 1963, pp 1-49.
JPRS 25476

Electronic Computers, On the Design of Trapped-Flux Superconductive Memories, by S. Ya. Berkovich, 48 pp.
RUSSIAN, booklet, Elektronnyye Vychislitel'nyye Mashiny. O Postroyeni Zapominayushchikh Ustroystv Iz Sverkhprovodyashchikh Elementov s Zakhvachennym Potokom, Moscow, 1963, pp 3-70.
JPRS 25634

High Speed Computer Memories, by V. V. Bardizh, V. I. Perekatov, 31 pp.
RUSSIAN, bk, Flyuksoy Kak Element Zapominayushchikh Ustroystv, Moscow, 1962, pp 1-48.
JPRS 25360

Linguistic Problems in the Recognition of Chinese and Japanese Characters, by S. M. Shevenko, 32 pp.
RUSSIAN, booklet, Lingvisticheskiye Voprosy Raspoznavaniya Znakov Kitayskogo i Japonskogo Pisma, Moscow, 1963, pp 1-42.
JPRS 25469

Soviet Calculating and Communications Equipment, by N. I. Shchedrin, 95 pp.
RUSSIAN, booklet, Sredstva Mekhanizatsii Inzhenernogo i Administrativno-Upravlencheskogo Truda, Moscow, No 2, 1963, pp 1-95.
JPRS 25435

Normal Algorithms and Recurring Functions, by V. K. Detlovs, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol XC, No 5, 1953, pp 723-725. 9693473
FTD-TT-64-276

On the Insolubility of Certain Topological Problems, by A. Markov, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXXII, No 6, 1958, pp 978-980. 9693220
FTD-TT-64-466

Progress Toward a Goal by the Random Search Method, by V. A. Mutseniyeks, L. A. Rastrigin, 14 pp.
RUSSIAN, per, Iz Ak Nauk Latvii SSR, Seriya Fiz i Tekh Nauk, No 2, 1964, pp 93-103.
JPRS 25202

Mathematical Statistics Method for Calculating Earth Displacement Operations in the Planning of Canals and Irrigation Districts, by I. V. Busalayev.
RUSSIAN, per, Problemy Gidroenergetiki i Vodnogo Khozyaystva, No 1, 1963, pp 158-167.
*AEC

Scientific
Mathematics & Data Processing (Contd)

On the Cauchy Problem for a Strongly Degenerating Hyperbolic Equation, by F. T. Baranovskiy.
RUSSIAN, per, Sibirskiy Matemat Zhur, Vol IV, No 5, 1963, pp 1000-1011.
Navy Tr 3862/APL J1041

On Approximation of Functions, by P. L. Ul'yanov.
RUSSIAN, per, Sibirskiy Matemat Zhur, Vol V, No 2, 1964, pp 418-437.
*Navy/APL J405

On Eigenvectors of Linear Completely Continuous Operators Defined in Semi-Ordered Nonnormalized Spaces, by V. M. Brodskiy.
RUSSIAN, per, Sibirskiy Matemat Zhur, Vol V, No 2, 1964, pp 468-471.
*Navy/APL J410

Shortest Curves on Lyapunov Surfaces With a Metric of Bounded Curvature, by Yu. G. Reshetnyak.
RUSSIAN, per, Sibirskiy Matemat Zhur, Vol V, No 2, 1964, pp 477-479.
*Navy/APL J406

Improved Expressions for the Matrix Elements of Operators of Spin-Dependent Interactions, by A. P. Iutsis, R. S. Dagla, et al, 17 pp.
RUSSIAN, per, Trudy Ak Nauk Litovskoy SSR, Ser B, Vol III, No 26, 1961, pp 53-66. 9222935
Amer Meteorol Soc
T-R-399

Mathematical Logic and Numerical Analysis, by A. A. Markov, 9 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, Vol XXVII, No 8, 1957, pp 21-25. 9693474
FTD-TT-64-500

One Optimal Control Problem, by B. G. Pittel', 18 pp.
RUSSIAN, per, Vest Leningrad Univ; Seriya Matematiki, Mekh, i Astron, Vol XIX, No 1, 1964, pp 76-87.
JPRS 25221

Solution of a Discrete Two Person Game With Bluffing, by M. A. Genin, 14 pp.
RUSSIAN, per, Vest Leningrad Univ; Seriya Matematiki, Mekh, i Astron, Vol XIX, No 1, 1964, pp 76-87.
JPRS 25221

A Control System With Doubling Actuating Elements, by I. T. Borisenok, 20 pp.
RUSSIAN, per, Vest Moskov Univ, No 2, 1964, pp 83-96.
JPRS 25232

Computer Mathematics and Engineering. Works of Postgraduates of the Institute of Cybernetics of the Academy of Sciences Ukrainian SSR, by G. A. Mikhaylov, V. N. Ostapenko. (SP-3285)
RUSSIAN, per, Vychislitel'naya Matematika i Tekhnika. Trudy Aspirantov Instituta Kibernetiki Ak Nauk UkrSSR, 1962, 179 pp.
*JPRS

A Numerical Method of Solving Certain Problems of Optimum Control, by B.N. Pshenichnyy, 25 pp.
RUSSIAN, per, Zhur Vychislitel Matemat i Matemat Fiz, Vol IV, No 2, Mar, Apr 1964, pp 292-305.
JPRS 25636

Approximate Calculation of Eigenvalues, by B. P. Pugachev.
RUSSIAN, per, Zhur Vychislitel Matemat i Matemat Fiz, Vol IV, No 2, 1964, pp 340-343.
*Navy/APL J409

One Method of Selecting an Inserted Variable in the Simplex Method of Linear Programming, by V. A. Mash, 7 pp.
RUSSIAN, per, Zhur Vychislitel Matemat i Matemat Fiz, Vol IV, No 2, Mar, Apr 1964, pp 376-379.
JPRS 25637

Scientific
Mathematics & Data Processing (Contd)

Study of Mathematical Logic, by Shao-Kiuei Mo.
CHINESE, per, Shu Hsueh Hsueh Pao, Vol XIII,
No 4, 1963, pp 485-507.
*FTD-TT-64-829

On the Tensor Products of Vector Spaces, by
Milos Dostal.
CZECH, per, Časopis pro Pěstování Matematiky,
Vol II, No 88, 1963, pp 156-172.
*Navy/APL J423

On the Problem of (P, Q) Analytic Functions of a
Complex Variable and Their Applications, by
G. N. Polozhiy.
FRENCH, per, Revue de Mathématiques Pures
et Appliquées, Vol II, 1957, pp 331-361. 9692809
DDC RSIC-172

Error Estimates in Relaxation Methods for a
Numerical Solution of Linear Systems of Equations,
by J. Albrecht.
GERMAN, per, Numerische Mathematik, Vol III,
1961, pp 188-201.
*Navy/APL J401

Study of the Exchange Integral and Investigation
of Approximate Formulas for Certain Integrals
Appearing in Problems of Molecular Structure,
by E. Scrocco, O. Salvetti, 10 pp.
ITALIAN, per, La Ricerca Scientifica, Vol XXIII,
No 1, 1953, pp 98-106. 9223013
Amer Meteorol Soc
T-1-12

Scientific
Nuclear Science & Technology

Theory and Methods of Nuclear Reactor Calculations,
by G. I. Marchuk.
RUSSIAN, bk.
Consultants Bureau

10 Years of the World's First Atomic Electric Power
Station in the USSR, by Yu. I. Koryakin. (NY-9305)
RUSSIAN, bk, 10 Let Pervoy v Mire Atomnoy Elek-
trostantsiy SSSR, Moscow, 1964, pp 3-213.
*JPRS

Operational Experience of the First Nuclear Power
Station, by G. N. Ushakov, L. A. Kochetkov, et al.
RUSSIAN, per, Atom Energ, Vol XV, No 6, 1964,
pp 484-488.
*AEC

I. V. Kurchatov Beloyarsk Nuclear Power Station,
by P. I. Aleshchenkov, Yu. I. Mityayev, et al.
RUSSIAN, per, Atom Energ, Vol XV, No 6, 1964,
pp 489-496.
*AEC

Study of the Action of Explosions, by V. K. Rubtsov.
RUSSIAN, per, Gornyy Zhur, No 2, 1963, pp 41, 42.
*AEC

Effect of Short Delay Blasting, by B. V. Pozdnyakov.
RUSSIAN, per, Gornyy Zhur, No 8, 1963, pp 25-28.
*AEC

Roar of Peaceful Explosions, by M. Sytyl.
RUSSIAN, per, Nauka i Zhyttya, Vol XII, 1962, p 43.
*AEC

The Underground Nuclear Explosions Are By No
Means Inoffensive, by G. M. Frank.
RUSSIAN, per, Novoye Vremya, Vol XX, 1963, pp 9, 10.
*AEC

Scientific
Nuclear Science & Technology (Contd)

Seismic Effect of Blasting, by L. A. Kogan.
RUSSIAN, per, Trudy Inst Seismol Stroy i Seismol,
Vol XI, 1962, pp 96-107.
*AEC

Shape of the Accumulation of Dirt in Draw Blasting
on a Slope, by G. I. Pokrovskiy.
RUSSIAN, per, Vzryvnoye Delo, No 51 (8), 1963,
pp 6-13.
*AEC

Controlled Blasting in Soils, by V. N. Kuznetsov.
RUSSIAN, per, Vzryvnoye Delo, No 51 (8), 1963,
pp 22-39.
*AEC

Oxidation and Surface Activity of Platinum
Monocrystalline Spherical Electrodes, by
B. Murafchiyev, 11 pp.
BULGARIAN, per, Izvestiya Bulgarska Akademiya
na Naukite. Institut po Fizikokhimiya, Vol II, 1962,
pp 93-100. 9693476
FTD-TT-64-156

On the Determination of the Deposition Velocity of
Radioactive Debris at Ispra, by M. de Bortoli,
P. Caglione, et al, 15 pp.
FRENCH, rpt, Oct 1963.
AEC-NP-Tr-1134

The Detection of Criticality Accidents of the
Commissariat a l'Energie Atomique,
by A. Barthoux, G. Debrie, et al.
FRENCH, rpt, La Detection des Accidents de
Criticité au Commissariat a l'Energie Atomique,
14-18 Jun 1964.
*AEC

Determination of the Efficiency of a Filter by Means
of Radioactive Ions of Known Dimensions, by J. Pradel,
F. Billard, et al, 7 pp.
FRENCH, rpt, International Symposium on Radioactive
Pollution of Gaseous Media, Saclay, 12-16 Nov 1963.
AEC-NP-Tr-1124

Fabrication of Swaged UO₂ Fuel Elements,
by F. Hofmann, H. Kroll, et al.
GERMAN, rpt.
*AEC

Determination of the Specific Activity of Some
Radionuclides, by H. Ruf, H. Munzel.
GERMAN, rpt, Karlsruhe, Feb 1964.
*AEC

Heat Transfer in Annular Clearances With Forced
Convection and Local Boiling, by H. Brauer,
30 pp.
GERMAN, per, Atomkernenergie, Vol VIII, No 1, 2,
1963, pp 1-9; 54-61.
AEC-TRG-Inf Ser-343

How Does the State Help the Atomic Industry Until
Atomic Energy Has Become a Commercial Proposition?
32 pp.
GERMAN, per, Atomwirtschaft, Vol IX, No 2, 1964,
pp 46-53. 9222973
AEC-Tr-6385

Some Problems Concerning Liability for Atomic
Injuries. Part I, by N. Pelzer.
GERMAN, per, Die Atomwirtschaft, No 5, 1964,
pp 202-207.
*AEC

Some Problems Concerning Liability for Atomic
Injuries. Part II, by N. Pelzer.
GERMAN, per, Die Atomwirtschaft, No 6, 1964,
pp 277-281.
*AEC

**Scientific
Nuclear Science & Technology (Contd)**

The Irradiation of a Target Inside a Cyclotron,
by J. Andrade e Silva, G. Lochak.
GERMAN, per, Nuclear Instruments and Methods,
Vol XXVI, 1964, pp 22-28.
*AEC

Single and Plural Scattering of Charged Particles,
by E. Keil, E. Zeitler, et al, 18 pp.
GERMAN, per, Z fuer Naturforschung, Vol XVa, 1960,
pp 1031-1038.
AEC-UCRL-Tr-1036

Activity of the Ispra Joint Research Center in the
Field of Shielding, by A. Kind, R. Nicka, 20 pp.
ITALIAN, rpt, Gionnate dell'Energia Nucleare, Milan,
13-15 Dec 1962.
AEC-ORNL-Tr-23

Preparation of the Protection Norm for a Hot
Operation Laboratory, by C. Cortisone.
ITALIAN, per, Minerva Nucleare, Vol VII, 1963,
pp 353-362.
*AEC

The 600-Kilovolt Electrostatic Accelerator at the
School of Engineering in Split, by Nikola Cindro, 10 pp.
SERBIAN, per, Tehnika, No 6, 1964, pp 1011-1014.
JPRS 25622

**Scientific
Physics**

Air Survey of Sand Deposits by Spectral Luminance,
by M. A. Romanova.
RUSSIAN, bk, Consultants Bureau

The Use of an Optical Quantum Generator for Diagnosis
of a Plasma, by A. N. Zaidel', G. M. Malishev, et al,
8 pp.
RUSSIAN, bk, Diagnostika Plazmy, 1963.
AEC-ORNL-Tr-58

Plasma Physics and Problems of Controlled
Thermonuclear Fusion.
RUSSIAN, rpt, Fizika Plazmy i Problemy
Upravlyаемого Termoyadernogo Sintez, Doklady
Vtoroi Konferentsii po Fizike Plazmy i Probleme
Upravlyanogo Termoyadernogo Sintez, 14-19 Noyabrya
1960, Kiev, 1963, 44 pp.
*AEC

Physics of the Boundary Layer of the Atmosphere,
by D. L. Laykhtman, 200 pp.
RUSSIAN, bk, Fizika Pogranichnogo Sloya Atmosfery,
1961.
OTS 64-11016
PL-480

The Theory of Fragmentation in the Processes of
Quasi-Elastic Scattering of Fast Particles on Light
Nuclei, by V. V. Balashov, A. N. Boyarkina, et al,
40 pp.
RUSSIAN, rpt, Joint Institute of Nuclear Research,
1963.
AEC-ANL-Tr-5

Cosmic Rays, by S. N. Vernov, L. I. Dorman, 294 pp.
RUSSIAN, bk, Kosmicheskiye Luchi,
IGY Program, Section VII, No 3, Moscow, 1961, 222 pp.
9223194-V
NASA TT F-126

**Scientific
Physics (Contd)**

Materials of the Scientific Technical Conference on
Nuclear Physics and Linear Accelerators, October 10-14,
1961, Part III. Storage Devices, 100 pp.
RUSSIAN, bk, Materialy Nauchno-Tekhnicheskoi
Konferentsii po Yadernoi Fizike i Lineinym
Ukoryaklyam, 10-14 Oktvbra 1961 Goda. Chast III.
Nakontel'nye Ustroistva, 1962, 131 pp. 9223165
AEC-Tr-6392

Electron Paramagnetic Resonance and Spin-Lattice
Relaxation of the ND3Plus Ion in Single Crystals of
CAWO4 and CAF2, by Mukhammed Fakir.
RUSSIAN, bk, Moskovskiy Gosudarstvennoy
Universiteta imeni Lomonosova, 1963.
*FTD-TT-64-823

A Dense High Temperature Plasma in the Region of a
Non-Cylindrical Accumulation of the Z-Pinch,
by N. V. Filippov, T. I. Filippova, et al, 22 pp.
RUSSIAN, rpt, Plotnaya Vusokotemperaturnaya Plazma
v Oblasti Netsilindricheskoi Kumulyatsii Z-Pincha,
9222974
AEC-UCRL-Tr-735(L)

Problems of Spatial Perception and Spatial
Concepts, by B. G. Anan'yev, B. F. Lomov, 273 pp.
RUSSIAN, bk, Problemy Vospriyatiya Prostranstva
i Prostranstvennykh Predstavleniy, Moscow, 1961,
200 pp. 9222901-V
NASA TT F-164

Physical Characteristics of the BR-5 Reactor, by
A. I. Leypunskiy, O. D. Kazachkovskiy, et al, 22 pp.
RUSSIAN, rpt, Proceedings of the IAEA Seminar on the
Physics of Fast and Intermediate Reactors, Vienna,
3-11 Aug 1961.
AEC-ANL-Tr-9

The Flow of Gas in Channels in the Presence of Heat
Exchange, by M. M. Nazarchuk.
RUSSIAN, bk, Techeniya Gaza v Kanalakakh pri Nalichii
Teplotobmena, Kiev, 1963, 123 pp.
*NASA TT F-262

Proceedings of the All-Union Conference on
Theoretical and Applied Mechanics, 739 pp.
RUSSIAN, bk, Trudy Vsesoyuznogo S'yezda po
Teoreticheskoy i Prikladnoy Mekhanike, 1962,
pp 1-468. 9693214
FTD-TT-63-471

Stability of Elastic Systems, by A. S. Vol'mir.
RUSSIAN, bk, Ustoychivost' Uprugikh Sistem,
Moscow, 1963, 879 pp.
*FTD-TT-64-863

Potential Logical Inverter Without Switching
Elements, by L. A. Vereshchagin, N. M. Rudnyy.
RUSSIAN, per, Avtomat i Priborostroyeniye,
No 1, 1964, pp 45-47.
*Navy/APL J412

Energy Spectra of Ions Scattered by Polycrystalline
Surfaces Over Small Angles, by V. A. Molchanov,
V. Soshka, 5 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV, No 1,
1964, pp 70-71. 9693239
FTD-TT-64-543

A Class of Non-Selfadjoint Boundary Value
Problems, by N. G. Askerov, S. G. Krein.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 3, 1964, pp 499-502.
*Navy/APL J411

The First Boundary Problem for Some Differential
Equations With Constant Coefficients, by
S. G. Ovsepyan.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV, No 3,
1964, pp 524-527.
*Navy/APL J414

Scientific
Physics (Contd)

Approximate Solution of Dirichlet's Problem for Laplace's Equation, by Ya. M. Zhileikin. RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV, No 5, 1964, pp 999-1002. *Navy/APL J419

Some Peculiarities of Exciton-Pair Coupling and of Exciton Decay on Phonons. The Effect of These Processes on Non-Equilibrium Carriers, by A. A. Lipnik. RUSSIAN, per, Fiz Tverdogo Tela, Vol VI, No 4, 1964, pp 1068-1074. *Navy/APL J407

Recombination Radiation in Cadmium Telluride During Excitation by Pulses of Fast Electrons, by V. S. Vavilov, E. L. Nolle, et al, 11 pp. RUSSIAN, per, Fiz Tverdogo Tela, Vol XI, No 5, 1964, pp 1406-1412. JPRS 25344

Analysis of a Cylindrical Shell Clamped Along an Oblique Contour, by M. I. Estrin, 8 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 2, 1959, pp 151-155. AEC-ORNL-Tr-19

The Unperturbability of a Spherical Pendulum of Variable Length With Motion of the Culcrum in a Central Gravitational Field, by M. Z. Litvin, 16 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 1, 1963, pp 33-40. 9693240 FTD-TT-64-413

Determinations of Constraints in a System of Rigid Bodies, by A. I. Lur'ye, 10 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 1, 1963, pp 41-46. 9693240 FTD-TT-64-413

Approximate Design of Protective Meteor Shields, by L. S. Bezgin, M. I. Ivashchenko, 7 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 1, 1963, pp 127, 128. 9693240 FTD-TT-64-413

Notes on the Dynamics of Cardan Suspension, by D. M. Klimov, 7 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Mekh i Mash, No 4, 1963, pp 7-9. 9693312 FTD-TT-64-416

The Equations of the Transverse Vibrations of Liquid-Filled Shells, by B. I. Rabinovich, 11 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekhanika i Mashinostroyeniye, No 1, 1964, pp 166-169. 9223043 NASA TT F-216

The Equations of the Axially Symmetric Vibrations of a Liquid-Filled Cylindrical Shell, by V. P. Shmakov, 11 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekhanika i Mashinostroyeniye, No 1, 1964, pp 170-173. 9223057 NASA TT F-219

Application of the Method of Photoelastic Coatings To the Determination of the Stresses and Deformations in Flexible Plates and Shells, by M. Kh. Akhmetzyanov, 8 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekhanika i Mashinostroyeniye, No 1, 1964, pp 199-201. 9223044 NASA TT F-220

Lunar Radio Emission-The Physical State and Nature of the Moon's Surface, by V. S. Troitskiy, 30 pp. RUSSIAN, per, Iz Komissii po Fizike Planet, No 3, 1961, pp 16-30. 9222895-V NASA TT F-172

Scientific
Physics (Contd)

Generalization of the Lorenz Condition for a Spherically Symmetrical Gravitational Field, by Ya. I. Pugachev. RUSSIAN, per, Iz Vysshikh Ucheb Zaved Fiz, No 1, 1964, pp 76-80. *Navy/APL J408

Two Theorems of the Theory of a Linear Homogeneous Differential Equation, by F. A. Mikhaylov. RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat, No 2, 1964, pp 120-126. *Navy/APL J420

Sonic Flow of Gas Around a Body of Revolution, by S. V. Falkovich, I. A. Chernov. RUSSIAN, per, Prikl Matemat i Mekh, Vol XXVIII, No 2, 1964, pp 280-284. *Navy/APL J418

Directivity of a Ring Multidipole Antenna, by I. I. Tsifrinovich. RUSSIAN, per, Radiotekhnika, Vol XVIII, No 12, 1963, pp 10-12. *Navy/APL J404

A Class of Composite Cyclic Codes in Simple Form, by O. P. Dmitriyev. RUSSIAN, per, Radiotekhnika, No 4, 1964, pp 68-75. *Navy/APL J415

Bipolar Flow in a Special Magnetic Field, by V. N. Danikov, 15 pp. RUSSIAN, per, Trudy Fiziko-Tekhnicheskii Institut, No 10, 1962, pp 67-79. 9693311 FTD-TT-64-619

A Theoretical Formula for the Weight of a Taper Wing, by N. N. Fadeyev. RUSSIAN, per, Trudy Moskovskiy Ordena Lenina Aviatsonnyy Institut, Metody Priblizhennykh Raschetov i Vybora Parametrov pri Proektirovani Samoletoy, No 138, 1961, pp 28-47. *FTD-TT-64-802

Energy Function Distributions in Elastic Vibrational Systems, by P. M. Senik. RUSSIAN, per, Trudy Voprosy Rasseyaniya Energii pri Kolebaniyakh Uprugikh Sistem. Nauchno-Tekhnicheskoobsovedcheniya, 1962, pp 40-13. *FTD-TT-64-809

Problems in High-Temperature Physics, by V. A. Kirillin, 11 pp. RUSSIAN, per, Vest Ak Nauk SSSR, Vol XXXIII, No 2, 1963, pp 38-43. 9693216 FTD-TT-64-295

New Camera for High-Speed Photography, by G. L. Shnirman, A. S. Dubovik, et al, 5 pp. RUSSIAN, per, Vest Ak Nauk SSSR, No 5, 1963, pp 73-75. 9223027 Amer Meteorol Soc T-R-420

Supersonic Flow Past Blunt Bodies of Revolution, by A. S. Mikhayev. RUSSIAN, per, Vest Leningrad Univ Mate Mekh Astron, No 1, 1964, pp 108-113. *Navy/APL J403

Configuration Interaction in Atomic Species of Beryllium Type, by A. P. Iutsis, V. I. Kavetakis, 11 pp. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XXI, No 10, 1951, pp 1139-1145. 9222936 Amer Meteorol Soc T-R-405

Solution of Simplified Fock Equations in Biconfigurational Approximation for the Beryllium-Type of Atoms, by A. P. Iutsis, V. V. Kibartas, et al, 8 pp. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XXVII, 1954, pp 425-430. AEC-ANL-Tr-16

Scientific
Physics (Contd)

Drift Instability in a Dense Plasma, by L. V. Mikhailovskaya, A. R. Mikhailovskiy, 0 pp.
RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLV, 1963, pp 1566-1571.
AEC-NP-Tr-1132

Investigation of the Charge-Exchange $\pi^- + p \rightarrow n + \pi^0$ and $\pi^- + p \rightarrow n + \gamma$ Reaction in the 1.25 - 4.5 Bev/c Region, by V. V. Barmin, A. G. Dolgolenko, et al, 15 pp.
RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLVI, 1964, pp 142-147.
AEC-NP-Tr-1128

Determination of Parameters of State of Solid Bodies at High Pressures, by Yu. S. Genshaft.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 5, 1962, pp 107-116.
*AEC

Scale Factor and the Effect of Strength in Directed Explosions, by V. M. Kuznetsov.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 3, 1963, pp 84-90.
*AEC

Dimensional Instability and Attenuation of Detonators, by R. M. Zaidel, Ya. B. Zel'dovich.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 6, 1963, pp 59-65.
*AEC

Initiation of Detonation in Molten TNT by a Shock Wave, by A. N. Dremmin, S. A. Koldunov, et al.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 6, 1963, pp 131-134.
*AEC

A High-Power Electric Spark in Air at Atmospheric Pressure, by I. S. Abramson, I. S. Marshak, 13 pp.
RUSSIAN, per, Zhur Tekh Fiz, Vol XII, No 10, 1942, pp 632-639. 9223018
Amer Meteorol Soc
T-R-414

Selection and Primary Focusing of Ions in a Source of Multidischarge Ions, by F. I. Mineyev, O. F. Kovpik, 11 pp.
RUSSIAN, per, Zhur Tekh Fiziki, Vol XXXIII, No 12, 1963, pp 1444-1448. 9693242
FTD-TT-64-541

The Influence of the Radiation on the Ionization Structure of the Shock Wave, by N. M. Kuznetsov.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIV, No 4, 1964, pp 624-629.
*Navy/APL J422

Solution of a System of Nonlinear Equations by the Method of Differentiation With Respect to the Parameter, by M. N. Yakovlev.
RUSSIAN, per, Zhur Vychislitel'noy Matemat i Matemat Fiz, Vol IV, No 1, 1964, pp 146-149.
*NASA TT P-254

Resolution of a Polynomial From Besselian Operators, by S. I. Osipov.
RUSSIAN, per, Zhur Vychislitel'noy Matemat i Matemat Fiz, Vol IV, No 1, 1964, pp 149-155.
*NASA TT P-255

Electromagnetic Resonance and Quantum Amplification of Matter, by Wang T'ien-chuan, 22 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 386-394.
JPRS 25741

The Crystalline Structure and Molecular Stereo Structures, by T'ang Yu-ch'i, 24 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 5, 1964, pp 394-405.
JPRS 25741

Scientific
Physics (Contd)

Possibility of Using Ceramics for Mirrors, 7 pp.
CHINESE, per, T'ien-Wen Hsueh-Pao, Vol A, No 1, 1962. 9693224
FTD-TT-64-170

Test Results Obtained With a 60-cm Parabolic Mirror, 9 pp.
CHINESE, per, T'ien-Wen Hsueh-Pao, Vol X, No 1, June 1962. 9693224
FTD-TT-64-170

Transient Stress Waves and Motion of Bodies, by J. Henrych.
CZECH, per, Strojnicky Casopis, No 1, 1964, pp 20-37.
*FTD-TT-64-843

Improvement of Minich and Fortran Lists, by J. Rognon, 9 pp.
DUTCH, rpt, 6 Feb 1964.
AEC-ANL-Tr-14

Study of the Planets by Means of the Polarization of Their Light, by Audouin Dollfus, 133 pp.
FRENCH, bk, Etude des Planetes par la Polarisation de leur Lumiere, May 21, 1955, 177 pp. 9223334-V
NASA TT P-188

First Notes on Double Refraction Artificially Produced in Regular Crystals, by M. G. Wertheim.
FRENCH, per, Comptes Rendus, Vol XXXIII, 1851, pp 576-579. 9693101
DDC RSIC-185

Second Notes on Double Refraction Artificially Produced in Regular Crystals, by M. G. Wertheim.
FRENCH, per, Comptes Rendus, Vol XXXVI, 1852, pp 276-278. 9693101
DDC RSIC-185

Photoelasticity Applications and Methods, by G. Delanghe, 24 pp.
FRENCH, per, Le Genie Civil, Vol XCI, 1927, pp 243-249. 9692935
DDC RSIC-191

Effect of Hydroxyl Radicals on the Kinetics of Carbon Monoxide Combustion, by F. Gaillard-Cusin, H. James.
FRENCH, per, Journal de Chimie Physique, Vol LXI, 1964, pp 363-373.
*AERE-Harwell

Radiolytic Reduction of Potassium Iodate in Alkaline Medium, by M. Haissinsky, J. Jove, et al.
FRENCH, per, Journal de Chimie Physique, Vol LXI, 1964, pp 572-576.
*AERE-Harwell

H₂O₂ Yields From Radiolysis of Aqueous Solutions by 5.3 MeV Alpha Rays, by M. Anta, M. H. Mariano, et al.
FRENCH, per, Journal de Chimie Physique, Vol LXI, 1964, pp 577-583.
*AEC

Infrared Polarimetry, by R. Duverney, A. M. Vergnou.
FRENCH, per, Journal de Physique et la Radium, Vol XVIII, 1957, pp 527-536.
*AEC

The Optical Determination of Internal Stresses, by Henry Favre, 26 pp.
FRENCH, per, Revue d'Optique, Vol XI, No 1, 1932, pp 1-32. 9693352
DDC RSIC-190

Reading Errors Pertaining to the McLeod Gage, by Paul Romann.
FRENCH, per, Le Vide, No 18, 1948, pp 522-530. 9692813
DDC RSIC-182

Scientific
Physics (Contd)

Measurement of the Contrast Transfer Function of X-Ray Intensifier Screens, by Manfred Hoefert, 24 pp.
GERMAN, per, Acta Radiologica, Vol I, 1963, pp 1111-1122.
AEC-NP-Tr-1135

Calculation of Optical and Electrostatic Lattice Potentials, by P. P. Ewald, 44 pp.
GERMAN, per, Annalen der Physik, Vol LXIV, No 4, 1921, pp 253-287.
AEC-AI-Tr-43

Formulation of the Laws of Nature in Terms of Nature in Terms of Five Homogenous Coordinates. Parts I and II, by W. Pauli.
GERMAN, per, Annalen der Physik, Vol XVIII, Series 5, 1933, pp 305-372.
*AEC

Measuring the Output of Characteristic X-Rays, Released by Protons, From Aluminum Alk-Radiation, by Otto Peter, 20 pp.
GERMAN, per, Annalen der Physik, Vol XXVII, No 5, 1936, pp 299-311.
AEC-UCRL-Tr-1050(L)

Thin-Layer Chromatography. IV. Scheme, Border Effect, Acidic and Basic Layers, Step Technique, by Egon Stahl, 9 pp.
GERMAN, per, Archiv der Pharmazie, Vol CCXCII, 1959, pp 411-416.
AEC-SC-T-64-611

Influence of the Heat Flux and of the Gas on Heat Transfer Coefficients in a Smooth Cylindrical Tube, by J. P. Delpont.
GERMAN, per, International Journal of Heat and Mass Transfer, Vol VII, 1964, pp 517-526.
*AEC

Production of Graphite-Coated Particles for Nuclear Fuel by the Fluidized Bed Process, by F. Benesovsky, E. Rudy.
GERMAN, per, Metall, No 10, 1962, pp 957-961.
AEC-Tr-5952

Investigations on the Ultrastructure of a Variant of the Furth Mice Mastocytoma, by M. Sellyei, H. David, 17 pp.
GERMAN, per, Mikroskopisch-Anatomische Forschung, Vol LXX, 1963, pp 103-117.
AEC-ANL-Tr-7

Detection of Short-Lived Molybdenum Isotopes From Fission and the Decay of Their Technetium Daughters. I. Decay Series Mo^{104} - Tc^{104} . II. Decay Series Mo^{105} - Tc^{105} - Ru^{105} , by P. Kienle, B. Weckermann, et al.
GERMAN, per, Die Naturwissenschaften, Vol XLIX, No 13, 1962, pp 294-296.
*AEC

The Effect of Aberrations on the Optical Transfer Function for Low Spatial Frequencies, by W. Lukosz, 29 pp.
GERMAN, per, Optica Acta, Vol X, 1963, pp 1-19.
9223022
Amer Meteorol Soc
T-G-200

Reduction of Contamination of Walls Surrounding the Sample by Ion Bombardment, by R. Buhl, 13 pp.
GERMAN, per, Optik, Vol XIX, No 2, 1962, pp 122-131.
9222990
AEC-ORNL-Tr-145

Experimental Investigation of Pressure Drop and Flow Velocity Distribution in Pipes With Regular Pattern of Roughness in Turbulent Flow, by Heinz Mobius, 43 pp.
GERMAN, per, Physikalische Zeitschrift, Vol XLI, 1940, pp 202-225. 96933533
DDC RSIC-220

Scientific
Physics (Contd)

Fire and Explosion Hazards in Dust Collection, by Gustav Kuhnert.
GERMAN, per, Staub, Vol XXIII, 1963, pp 92-94.
*AEC

A New Method of Dust Measurement, by H. C. Siegmann.
GERMAN, per, Technische Rundschau, No 2, 1963, pp 29, 30.
*AEC

On the Production of High Magnetic Fields for Brief Periods, by P. Cotti.
GERMAN, per, Z fuer Angewandte Mathematik und Physik, Vol XI, No I, 1960, pp 17-32.
*AEC

Condensation of Mercury Vapor on Cooled Surfaces, by Helmuth Walther, 12 pp.
GERMAN, per, Z fuer Angewandte Physik, Vol X, No 6, 1958, pp 272-277. 9222988
AEC-ANL-Tr-28

Automatic Adiabatic Microcalorimeter for Measurement of Radioactivity, by A. Hilt, Al. Santelevici, 9 pp.
ITALIAN, per, Accademia Repubblica Popolare Romina Institutul Fiz. Studi Cercetari Fiz, Vol VI, 1955, pp 373-376.
AEC-UCRL-Tr-1034(L)

Correction Method for Matrix Effect in Fluorescent X-Ray Analysis. Part I, by Masakatsu Sugimoto, 24 pp.
JAPANESE, per, Bunseki Kagaku, Vol XI, 1962, pp 1168-1176. 9693357
DDC RSIC-219

Studies on Corrosion of Graphite by Molten Bismuth, by Y. Kamemoto, Y. Takahashi, et al.
JAPANESE, per, Nippon Genshiryoku Gakkaiishi, Vol VI, No 2, 1964, pp 71-76.
*AERE-Harwell

Light Scattering by an Intense Light Beam, by S. Klelich.
POLISH, per, Acta Physica Polonica, Vol XXV, No 1, 1964, pp 85-99.
*FTD-TT-64-835

Co^{57} - Fe^{57} Sources for Mossbauer Effect Measurement, by I. Dezsi.
POLISH, per, KFKI Kozlomenyek, Vol XII, No 1, 1964, pp 111-118.
*AERE-Harwell

On Free Oscillations of a Cylindrical Shell Reinforced With Stiffening Ribs, by M. I. Karpov, 7 pp.
UKRAINIAN, per, Dopovidni Ak Nauk Ukr SSR, No 8, 1963, pp 1018-1021. 9693247
FTD-TT-64-72

Source of Protons With Thermal Dissociation of Hydrogen Molecules, by M. D. Gabovich, Z. P. Fedorus, 13 pp.
UKRAINIAN, per, Ukrains'kiy Fizichnyi Zhur, Vol I, No 2, 1956, pp 158-169. 9693241
FTD-TT-64-522

On the Question of Exciting Longitudinal Waves in Plasma by Radio Waves, by A. M. Fedorchenko, 7 pp.
UKRAINIAN, per, Ukrainsky Fizichny Zhurnal, Vol VIII, No 5, 1963, pp 555-559. 9693383
FTD-TT-64-174

**Scientific
Miscellaneous**

Soviet Progress in Forest Fire Control, by
N. P. Kurbat'skiy.
RUSSIAN, bk.
Consultants Bureau

Self Teaching Systems With Positive Feedback,
by A. G. Ivakhnenko, 279 pp.
RUSSIAN, bk, Samoobuchayushchiyesya Sistemy,
Kiyev, 1963, pp 1-328.
JPRS 25603

Lenin Prizes in Science and Engineering, 6 pp.
RUSSIAN, np, Izvestiya, 22 Apr 1964, p 4.
JPRS 25352

Poorly Planned Scientific Institutes in the Volga
Region, by L. Kulikovskiy, 5 pp.
RUSSIAN, np, Izvestiya, 29 May 1964, p 3.
JPRS 25523

List of Members of the Academy of Sciences of the
Union Soviet Socialist Republic.
RUSSIAN, np, Izvestiya, No 137, 9 Jun 1964, pp 3, 4.
*FTD-TT-64-825

Cybernetics and the Development of Sciences,
by E. A. Yakubaytis, 5 pp.
RUSSIAN, per, Iz Ak Nauk Latvyskoy SSR, No 12,
1963, pp 24-26.
JPRS 25714

Organization of Scientific Information Activity in the
Polish Academy of Sciences, by A. Vysotskiy, 10 pp.
RUSSIAN, per, Nauchno-Tekh Informats, No 3,
1964, pp 52-54.
JPRS 25763

29th Conference of the International Federation
for Documentation, by A. I. Mikhaylov, 7 pp.
RUSSIAN, per, Organizat i Metod NIT, No 2,
1964, pp 3-5.
JPRS 25604

Our Science at New Frontiers, by M. V. Keldysh.
RUSSIAN, np, Pravda, 4 Feb 1964, pp 1, 2.
NLL Tr Bulletin
Vol VI, No 7, 1964

Water Supply Problems in the FSFSR,
by N. G. Ovsyannikov, 10 pp.
RUSSIAN, per, Priroda, No 3, 1964, pp 9-18.
JPRS 25361

Pedagogical Tasks in Pioneer Sections Discussed,
by S. Pletnev, 9 pp.
RUSSIAN, per, Shkola-Internat, No 4, 1963,
pp 47-50.
JPRS 25213

Indices of Electronic Equipment Utilization,
by Ya. Kvasha, 11 pp.
RUSSIAN, per, Vest Statistiki, No 3, 1964,
pp 8-15.
JPRS 25366

Theoretical Problems of Automatic Economic
Information Processing, by M. Korolev, 12 pp.
RUSSIAN, per, Vest Statistiki, No 3, 1964,
pp 63-71.
JPRS 25366

The Riddle of "PSI" Phenomena, by Eduard Naumov,
7 pp.
RUSSIAN, np, Vodnyy Transport, No 142, Nov 28,
1963, p 3. 9693471
FTD-TT-64-288

**Scientific
Miscellaneous (Contd)**

On the Cybernetic Approach to the Problem of Image,
by L. M. Vekker, M. G. Yaroshevskiy, 10 pp.
RUSSIAN, per, Voprosy Filosofii, No 5, 1964, pp 173-177.
JPRS 25761

Design and Application of the Acoustics Laboratory,
by Ma Ta-yu, 22 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4,
1964, pp 295-305.
JPRS 25656

Directive of the President of the Hungarian
Academy of Sciences Concerning Scientific
Qualification and Scientific Degrees, by
Istvan Rusznyak, 67 pp.
HUNGARIAN, per, Akademiai Kozlony,
Vol XIII, No 6, 8 May 1964, pp 37-60.
JPRS 25376

Problems of Technical Progress, by Jerzy Kopinski,
Kazimierz Leski, 171 pp.
POLISH, bk, Problemy Postepu Technicznego, 1960,
201 pp.
OTS 61-11318
PL-480

INFORMATION RECEIVED DURING AUGUST

ON COVER-TO-COVER TRANSLATIONS

Acta Medica Iugoslavica, Vol XVII, No 1, 1963.	OTS 63-11456/1 PL-480
Acta Physiologica Polonica, Vol XIV, No 4, 1963.	OTS 63-11407/4 PL-480
Acta Poloniae Pharmaceutica, Vol XX, No 4, 1963.	OTS 63-11412/4 PL-480
Archivum Immunologiae et Therapiae Experimentalis, Vol XII, No 1, 1964.	OTS 64-11410/1 PL-480
Arhiv Bioloskih Nauka, Vol XIV, No 3, 4, 1962.	OTS 62-11759/3-4 PL-480
Atomnaya Energiya, Vol XV, No 3, 1963.	CB
Bilten Instituta za Nuklearne Nauke Boris Kidric, Vol XV, No 1, 1964.	AEC-Tr-6227/1 PL-480
Bioloski Glasnik, Vol XV, No 3, 1962.	OTS 62-11762/3 PL-480
Byulleten' Eksperimental'noi Biologii i Meditsiny, Vol LV, No 4, 1963.	CB
Doklady Akademii Nauk SSSR, Biological Sciences Section, Vol CL, No 1-6, 1963.	CB
Doklady Akademii Nauk SSSR, Biological Sciences Section, Vol CLI, No 1-6, 1963.	CB
Doklady Akademii Nauk SSSR, Soviet Mathematics, Vol CLV, No 1-6, 1964.	Amer Math Soc Sov Math-Doklady Vol V, No 2
Epidemiological Review, Vol XVII, No 1,2, 1963.	OTS 63-11414/1-2 PL-480
Geodeziya i Aerofotosiemka, No 4, 1963.	Amer Geophys Union
Geomagnetizm i Aeronomiya, Vol III, No 5, 1963.	Amer Geophys Union
Glasnik Hemijskog Drustva, Vol XXVII, No 7, 8, 1962.	OTS 62-11757/7-8 PL-480

Inzhenernyy Zhurnal, Vol IV, No 1, 1964.	JPRS 25622
Izmeritel'naya Tekhnika, No 1, 1964.	Instr Soc of Amer
Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol XXVII, No 7, 1963.	CTT
Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, No 3, 4, 1964.	Amer Geophys Union
Izvestiya Vysshikh Uchebnykh Zavedeniy Radiotekhnika, Vol VII, No 3, 1964.	*JPRS
Kinetika i Kataliz, Vol IV, No 3, 4, 1963.	CB
Kolloidnyi Zhurnal, Vol XXV, No 2, Mar, Apr 1963.	CB
Lijecnicki Vjesnik, Vol LXXXV, No 5-7, 1963.	OTS 63-11458/5-7 PL-480
Optika i Spektroskopiya, Vol XVI, No 4, 1964.	Optic Soc of Amer
Pochvovedeniye, No 4-6, 1963.	Scripta Technica
Saopstenja Institut za Vodoprivredu Jaroslav Cerni, Vol X, No 29, 1963.	OTS 63-11451/4 PL-480
Uspekhi Fizicheskikh Nauk, Vol LXXXI, No 1, 2, 1963.	Amer Inst of Phys Sov Phys-Uspekhi Vol VI, No 5
Uspekhi Fizicheskikh Nauk, Vol LXXXII, No 1, 2, 1964.	Amer Inst of Phys Sov Phys-Uspekhi Vol VII, No 1
Vestnik Akademii Meditsinskikh Nauk SSSR, Vol XIX, No 7, 1964.	*JPRS
Vestnik Akademii Nauk SSSR, No 4, 1964.	JPRS 25717
Vestnik Svyazi, Vol XXIV, No 5, 1964.	JPRS 25555
Vestnik Svyazi, No 7, 1964.	*JPRS
** Vestnik Vysshey Shkoly, No 1, 1964. 9693296	FTD-TT-64-136
Zhurnal Analiticheskoi Khimii, Vol XVIII, No 9-11, 1963.	CB
Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, Vol XLVI, No 1, 1964.	Amer Inst of Phys Sov Phys-JETP Vol XIX, No 1

Zhurnal Obshchei Khimii, Vol XXXIII, No 7, 9, 1963.

CB

Zhurnal Prikladnoi Khimii, Vol XXXVI, No 6, 1963.

CB

Zhurnal Strukturnoi Khimii, Vol IV, No 5, 1963.

CB

* In Process

** Table of contents not available

Tables of contents follow for the above cover-to-cover translations

TABLE OF CONTENTS

	Page
<i>Zarko Ivančević:</i>	
Nonspecific Stimulation of Antibody Production by Inoculation of Nonrelated Bacteria	5
<i>S. Djurišić:</i>	
Examples of the Cristalographic Diagnosis of Gynecological Aspirates	13
<i>A. Naumovski and I. Dejanov:</i>	
The Influence of Constant Electric Current on the Coagulation of Blood	24
<i>D. S. Djurić, J. V. Mitić, and N. Simić:</i>	
Lipidogram in Patients with Hyperthyreosis	31
<i>M. Jovanović and N. Svecenski:</i>	
The Influence of Gamma Radiation with ⁶⁰ Co on the Urinary Excretion of Free Aminoacids in Rats	37
<i>M. Medaković and B. Banić:</i>	
A Contribution to the Knowledge of the Mechanism of the Effect of Carbon Tetrachloride on the Action of Morphine	42
<i>Vladislav M. Varagić and Milovan K. Krstić:</i>	
A Fairly Rapid Simple Biological Method for the Estimation of Catecholamines in Urine	49
<i>R. Anastasijević:</i>	
A Contribution to the Study of the Problem of Skeletal Muscle Contraction (III)	58
<i>R. Anastasijević:</i>	
A Contribution to the Study of the Problem of Skeletal Muscle Contraction (IV)	62
<i>B. Djordjević, Ž. Ignjačev, M. Sindjić, I. Stojanović:</i>	
Noradrenaline-Induced Myocardial Changes in Dogs	71
<i>B. Nešković and B. Garžićić:</i>	
Microorganisms of the Pleuropneumonia Group in Cell-Cultures <i>in vitro</i>	82

Available From OTS 63-11456/1
PL-480

ACTA PHYSIOLOGICA POLONICA
Vol XIV, No 4, 1963

CONTENTS

	Page
<i>Bulak K., Malofiejew M.</i> : Preparation of Fibrinolysis Activator in the Extra- corporate Kidney	351
<i>Gaertner H., Lisiewicz J., Szirmai E., Sieroslowski H.</i> : The Effect of Epsi- lon-Aminocaproic Acid on Plasma Clotting Time	359
<i>Walawski J., Ryżewski J.</i> : Neurovegetative Changes in the Peripheral Vascular Reactions Following X-ray Irradiation	363
<i>Walawski J., Kaleta Z.</i> : Some Reactions of the Circulatory System in the State of Prolonged Weightlessness Produced by the Immersion Method	373
<i>Wisłoni-Buczkowska H.</i> : The Plasma Histamine during the Last Days of Pregnancy in Rat	378
<i>Spioch F., Kobza R.</i> : Dynamics of the Functional Circulatory Changes in Man at the High Air Temperature and Humidity	384
<i>Spioch F., Kobza R.</i> : Dynamics of the Biochemical and Morphological Changes in Human Blood under the Influence of the High Air Tem- perature and Humidity	391
<i>Banaszkiewicz W., Chodera A.</i> : The Effect of Trasylol on Vascular Reactions after Kallikrein	401
<i>Kawęcki A., Rotenberg S.</i> : The Effect of Eggs Immersion in Cobalt Salt Solution on the Content of Tissue Cobalt and Growth of Chickens	409
<i>Woroszczuk M.</i> : Methodological Studies on the Pregnenetriol with the Aid of Thin-Layer Chromatography	420
<i>Proceedings of Branches of the Polish Physiological Society</i>	425

Available From OTS 63-11407/4
 PL-480

CONTENTS

Z. Kolodyńska, S. Biniecki: Synthesis of Some Quinoxalyl- and Diquinoxalylidiamines	261
H. Bojarska-Dahlig: Studies in Monoamine Oxidase Inhibitors. Part III. Hydrazine Derivatives of Some Arylacetic Acids	270
K. Kalinowski, Z. Zwierzchowski: Chlorocoulometric Microdetermination of Sodium, Potassium and Dicalcium Salts of Paraaminosalicylic Acid	281
K. Kalinowski, Z. Zwierzchowski: Coulometric Microdetermination of Mixture of Isonicotinic Acid Hydrazide and Sodium Salt of Paraaminosalicylic Acid with Use of Two Halogens	288
W. Rusiecki, R. Dymkowski: Distribution of Cyanides in Rat's Body After Lethal Poisoning	294
S. Kohlünzer, B. Waclaw-Rozkrutowa: Isolation of Xanthotoxine and Marmesin from <i>Ammi Majus</i> L. Fruits	301
J. Żurkowska, M. Budzyńska, W. Kroszczyński, A. Ożarowski: Cardenolide Glycosides. V. Studies in the Active Substances Obtained from the Herb of <i>Convallaria majalis</i> L.	309
Z. Zwolińska, M. Zadumski, I. Wasilewska, L. Krówezyński: Effects of the Method of Preparation and of Raw Material Quality on the Stability of Thiamine Hydrochloride Aqueous Solutions for Injections	319
SCIENTIFIC COMMUNICATION	
B. Gogolińska, I. Gruda: Synthesis of Bromonitrobenzyl Bromides	325

Available From OTS 63-11412/4
PL-480

ARCHIVUM IMMUNOLOGIAE ET
THERAPIAE EXPERIMENTALIS,
Vol XII, No 1, 1964

CONTENTS

SŁAWOMIR WITKOWSKI: Influence of Diphtheria Toxin on the Phosphorylation of Thiamine.	1
MARIAN MULCZYK, TADEUSZ M. LACHOWICZ and WANDA HOHENDORF: Respiration of <i>S. sonnei</i> /Bacilli	8
JADWIGA WIECZOREK, LESZEK SZERSZEN, TADEUSZ KRZYWY and STANISŁAW BARANOWSKI: The Occurrence of <i>Actinomyces</i> in the Region of the Werenskiöld Glacier (SW Spitsbergen) in Relation to Ecologic Factors	14
STANISŁAW GRYS: The Response to TTD Antigen. I. Immunogenicity and Allergenicity of TTD Antigen	25
STANISŁAW GRYS: The Response to TTD Antigen. II. Cellular Response to TTD Antigen	30
WANDA WOŹNICKA: The Significance of Variation of Some Antibiotic <i>Actinomyces</i> for the Taxonomy of Microorganisms of this Genus	37
TERESA WYSZYŃSKA: The Effect of Deficiency of Pancreatic Lipotropic Hormone on the Serum Protein Pattern in Rats.	55
TERESA WYSZYŃSKA: The Effect of Deficiency of Pancreatic Lipotropic Hormone on the Development of Experimental Nephrosis	68
WALDEMAR FORTAK: Histologic and Histochemical Studies on the Influence of Biostymin on Regeneration of Hepatic Parenchyma in White Rats.	80
WALDEMAR FORTAK, MICHAŁ KARASEK and JACEK KOLASZYŃSKI: Histologic and Histochemical Studies on the Mechanism of Action of Biostymin in the Animal Body	96
MARIAN KOCHMAN, PRZEMYSŁAW MASTALERZ and ELŻBIETA WOLNA: Phosphonic Acids — a New Group of Competitive Inhibitors of Intestinal Alkaline Phosphatase	106
JERZY GIEŁDANOWSKI and WIESŁAW PRASTOWSKI: Erythrocytic Carbonic Anhydrase Activity of Certain Experimental Animals.	113
TADEUSZ BOGDANIK: The Application of Cybernetic Methods in the Diagnosis and Treatment of Diabetes	118
Available From OTS 64-11410/1 PL-480	

CONTENTS

	Page
<i>Risto Buzalkov</i>	
On the Influence of a High Temperature Adapted Environment on the Nictohemeral Variation of Body Temperature and Ther- mogenesis of Rats — — — — —	5
<i>I.J. Rakić and D. Petković</i>	
Direct Irritability of Rabbit Myocardium in an Insulin Hypogly- cemic Coma — — — — —	11
<i>M. Janković and R. Bogojević</i>	
A Contribution to the Knowledge of the Forests of Endemic Pines — <i>Pinus Heldreichii</i> and <i>Pinus Peuce</i> — on the Northern Side of the Sara Mountain and on Its Spurs Projecting into the Me- tohija Province — — — — —	19
<i>Mirjana Janković and Milorad Janković</i>	
The Ecological Conditions of Water Vegetation in the Mlava Spring at Zagubica with a Special Review of the Plant <i>Calli- triche verna</i> — — — — —	31
<i>Milorad Janković</i>	
On Peculiarities in Branching of <i>Pinus Heldreichii</i> and Their Ecologic Aspect — — — — —	43
<i>Branislav Jovanović</i>	
A Habitat of Heather (<i>Calluna vulgaris</i> (L.) Hull.) in Western Serbia — — — — —	81
<i>Jakov Danon and Sava Radmić</i>	
An Ecological Analysis of Herbaceous Vegetation of the Southern Kučaj — — — — —	97
<i>Tomislav Cupina</i>	
The Compensation Point and Saturation of Photosynthesis of Corn Leaves and Sorghum in Dependence upon Light Intensity	117
<i>Bibliography</i> — — — — —	125

Available From OTS 62-11759/3-4
PL-480

SOVIET ATOMIC ENERGY

A translation of **ATOMNAYA ÉNERGIYA**
A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Vol. 15, No. 3

September, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
Kinetic Energy and Angular Distribution of the Fragments from Neutron and Photon Fission of U^{235} — B. A. Bochagov, A. P. Komar, V. I. Fadeev	891	191
Calculation of the Pulse Height Distribution and Counting Efficiency of a Fast Neutron Scintillation Detector — V. G. Zolotukhin, G. G. Doroshenko, and B. A. Efimenko	895	194
A Study of Thermal Neutron Sources — R. D. Vasil'ev, G. A. Dorofeev, G. S. Mordovskaya, V. I. Petrov, and M. I. Pimenov	902	200
Free Particle Oscillation Frequency in an Isochronous Cyclotron as Affected by Space Charge — A. A. Glazov, V. P. Dzhelepov, V. P. Dmitrievskii, B. I. Zamolodchikov, V. V. Kol'ga, A. A. Kropin, L. M. Onishchenko, and E. Shvabe	906	205
The Thermodynamic Properties of Carbon Dioxide at Temperatures of 0-1000°C and Pressures up to 100 Bars — M. P. Vukalovich, V. V. Altunin, and N. I. Timoshenko	912	210
Contamination of the Steam in Boiling Reactors from Solution of Water Impurities — M. A. Styrikovich and O. I. Martynova	917	214
An Investigation of the Volatilization Mechanism of Ruthenium, Coprecipitated with Different Substances, at High Temperatures — Yu. N. Golovanov, N. E. Brezhneva, S. N. Oziraner, A. A. Eremin, and V. L. Sotov	922	219
Multicomponent Radiometric Analysis of Rock Samples by Means of an LSU-5 (Laura) Scintillation Apparatus — A. I. Yakubovich, F. I. Zaitsev and V. V. Anosov	928	224
The Trapping of Short Lived Radon Daughter Products by FP Fibrous Filters — B. I. Ogorodnikov, V. N. Kirichenko, P. I. Basmanov, and I. V. Petryanov	935	230
Hot Aerosol Particles in the Atmosphere — S. G. Malakhov, K. P. Makhon'ko	942	238
Study of the Correlation between the Mass Distribution of Fission Fragments and the Quantum Characteristics of a Nucleus at a Saddle Point — P. P. D'yachenko, B. D. Kuz'minov, L. S. Kutsaeva, A. I. Sergachev, and A. N. Utyuzhnikov	950	246
Resonance Levels of Erbium Isotopes — M. F. Vlasov, V. P. Vertebnyi, and A. L. Kirilyuk	952	247
The Energy Distribution of Cm^{244} Spontaneous-Fission Fragments — L. Z. Malkin, I. D. Alkhazov, A. S. Krivokhatskii, D. A. Petrzhak, and L. M. Belov	955	249

Available From Consultants Bureau

(Continued)

(continued)

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
Channeling Effects in the Energy Dependence of the Average Kinetic Energy of U^{235} Fission Fragments — V. N. Okolovich and G. N. Smirenkin	956	250
Calculation of the Penetration of Neutrons Through a Plane Layer of Polyethylene — S. M. Ermakov, V. G. Zolotukhin, and É. E. Petrov	960	253
Relaxation of the Temperature of a Neutron Gas — E. Ya. Dol'nitsyn, A. G. Novikov, I. P. Stakhanov, and A. S. Stepanov	963	255
Fuel Element Based on Teflon-4 for Critical Assemblies — N. N. Ponomarev-Stepnoi, S. S. Lomakin, and Yu. G. Degal'sev	968	259
High Temperature Volatilization Mechanism of Cesium Coprecipitated with the Double Ferrocyanide of Nickel and Potassium — Yu. N. Golovanov, N. E. Brezhnev, S. N. Oziraner, A. A. Eremin, and V. L. Zomov	970	261
The Presence of α -Radiating Hot Aerosol Particles in the Atmosphere — B. I. Styro, Ch. A. Garbalyauskas, V. P. Matulevichus, V. Yu. Potsyus, and K. K. Shopauskas	972	262
Radioactive Fallout in Crimea, 1960-1961 — L. I. Belyaev, L. I. Gedeonov, Z. G. Gritchenko, A. M. Maksimova, V. P. Shvedov, G. V. Yakovleva	974	264
NEWS OF SCIENCE AND TECHNOLOGY		
Seminar on Refractory Metals, Refractory Compounds, and Refractory Alloys — O. S.	977	266
Conference on the Use of Research Reactors in Chemical Research — An. N. Nesmeyanov	979	267
Symposium on Siting of Nuclear Reactors and Research Centers — V. K.	980	268
International Scientific and Technical Conference on Labeled Compounds — V. Bochkarev	982	269
The Outlook for Swedish Power Development till 1980 — Yu. K.	984	271
Survey of International Rules and Regulations on Shipping of Radioactive Materials — N. I. Leschinskii	985	272
BIBLIOGRAPHY		
New Literature	987	278
Articles from the Periodical Literature	988	275

Available From Consultants Bureau

BILTEN INSTITUTA ZA NUKLEARNE NAUKE
"BORIS KIDRIČ"
Vol XIV, No 1, 1964

TABLE OF CONTENTS

	Page
The separation of uranium from some cations on a column with a 4A-type molecular sieve as an ion-exchanger, by M.V. Šušić, V.M. Radak, D.S. Veselinović, and N.A. Petranović	1
Determination of CO ₂ , H ₂ and O ₂ in aqueous solutions by gas chromatography, by Lj.V. Petković, M.M. Kosanić, and I.G. Draganić.	9
Broadening and shift of the Al III spectral lines in strongly ionized plasma, by M.A. Mazing, M.D. Marinković, and N.A. Vrublevskaja	15
Effects of whole body and local X-irradiation on the reproductive ability of male rats irradiated in the infantile period and changes in the first generation, by N.V. Savković, D.V. Radivojević, and S.I. Hajduković	25
Proposal for a new method of reactor neutron flux distribution determination, by R.V. Popić	47
List of papers	50

Available From AEC-Tr-6227/1
 PL-480

CONTENTS

T. Čilić and U. Bego:

	Page
Arteries, Veins and the Excretory System of the Kidney of the Polar Bear (<i>Thalarctos Maritimus</i>)	

E. R. Reichl:

Population-genetical Investigations on <i>Zygaena transalpina</i> Esp. I. Esp. <i>tilaventa</i> Holik	21
--	----

Z. Karaman:

A Review of the Genus <i>Leptomastax</i> Piraz. (Col. Scydmaenidae)	35
---	----

M. S. Karaman:

A Contribution to Macedonia's Ichthyofauna. — Fam. <i>Percidae</i>	65
--	----

Available From OTS 62-11762/3
PL-480

BULLETIN OF EXPERIMENTAL BIOLOGY AND MEDICINE

A translation of **BYULLETEN' EKSPERIMENTAL'NOI
BIOLOGII I MEDITSINY**

A publication of the Academy of Medical Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Vol. 55, No. 4, pp. 359-476

June, 1964

CONTENTS

	P A G E	
	ENG.	RUSS.
PHYSIOLOGY		
Functional Organization of the Bulbar Vasomotor Center. Communication I.		
Excitability of the Neurone of the Pressor and Depressor Zones in Different		
Functional Conditions — A. M. Blinova, N. K. Saradzhev, and F. D. Sheikhon.	359	3
The Effect of Hypercapnia on the Blood Supply to the Heart — I. N. Kiryushina.	366	9
The Relationship of Electrical to Metabolic Activity in the Olfactory Bulbs of		
Hibernating Animals — M. B. Shtark	370	14
PATHOLOGICAL PHYSIOLOGY AND GENERAL PATHOLOGY		
The Auricular Rhythm in Patients with the Morgagni-Adams-Stokes Syndrome Before		
and After Electrical Cardiac Stimulation — Yu. I. Bredikis and I. G. Kostenko.	375	19
Damage to the Frontal and Parietal Lobes of the Brain and Conditioned Reflexes		
in Unconstrained Subjects — A. N. Sovetov	378	22
Parotid Gland Function after Partial Extirpation — R. S. Rzhinashvili	381	26
The Role of Stretch Receptors of the Left Ventricle in Reflex Hemodynamic Changes		
Due to Myocardial Ischemia — A. V. Dokukin	384	29
The Effect of Extensive Resection of the Proximal and Distal Portions of the Small		
Intestine on Canine Gastric Secretion — B. I. Sabsai	387	32
A Gastric Ulcer in Rats of Various Ages — V. D. Rozanova	391	37
Motility of the Gut and Evacuation in Experimental Lead Poisoning — A. A. Mambeeva	395	41
BIOCHEMISTRY AND BIOPHYSICS		
Esterase Activity of the Blood of Various Animal Species — V. A. Filov.	398	45
The Influence of Thyroidin on Tissue Cholesterol in Experimental Atherosclerosis		
— A. L. Myasnikov and V. F. Zaitsev.	400	47
An Immunologic Study of the Lactogenic Hormone — V. M. Dil'man, E. P. Ivanteeva,		
and B. N. Sofronov.	403	49

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	
		ENG. RUSS.
PHARMACOLOGY		
Participation of the Stem Portions of the Brain in Realizing the Effect of Certain Pharmacological Agents on the Periodic Contractions of the Stomach — L. L. Grechishkin	406	53
The Effect of Chlor-Iso-Propamide on Experimentally Induced Resistance to Insulin — S. G. Genes and N. G. Lesnoi	410	56
On the Cholinergic Reactions and Sympathoadrenal Activity Associated with Experimental Hyperthyroidism in White Rats — B. B. Voznesenski and N. K. Khitrov	415	61
MICROBIOLOGY AND IMMUNITY		
The Transformation of Staphylococci by Killed Cultures of <i>Salmonella typhimurium</i> and <i>Listeria monocytogenes</i> Resistant to 75,000 Units/MI of Streptomycin — V. N. Polshkova	419	66
The Isolation of Microorganisms (PPLO) of Pleuropneumonia-like Illness from Tissue Cultures — V. S. Levashev and V. Ya. Shevlyagin	422	70
The Reaction of Complement Fixation as a Method for Serologically Characterizing Antitissue Sera — A. K. Saakov	425	73
The Formation of Tissue Hemolysins in Liver Extracts of White Rats Fed with Linseed Oil — V. V. Antipov	429	77
ONCOLOGY		
On Cysts in Mice of the Low Cancer Line C57BL — V. M. Zhdanov and V. A. Parnes	433	82
Morphological Changes in Mammary Gland Cancer of Rats (RMK-1) Under Conditions of Repeated Transplants — V. P. Konoplev and N. D. Lagova	442	91
A Comparative Study of the Antigenic Structure of Tumor and Homologous Normal Tissue. Report V. Investigation of the Antigenic Properties of Guerin's Carcinoma, Normal Uterus, and Rat Erythrocytes, Using the Method of Complement Fixation and the Method of Tissue Cultures — M. S. Lomakin and E. V. Sokolova	445	94
Development of Intralateral Transplants of Ovary under Conditions of Mechanical Stimulation of the Hypothalamus — Yu. N. Bordyushkov	451	100
EXPERIMENTAL BIOLOGY		
Inductive Properties of Transplanted Transitional Rat Epithelium — A. Ya. Fridenshtein and K. S. Lalykina	454	104
MORPHOLOGY AND PATHOMORPHOLOGY		
A Histochemical Determination of the Denaturation of the Proteins of the Nerve Cell Induced by Alcohol — V. V. Portugalov, I. B. Krasnov, and T. V. Ball'	458	108
Changes in the Hypothalamic Nuclei in Experimental Allergy — D. E. Al'pern and E. V. Sidorenko	461	110
Histochemical Features of Lipid Metabolism and Lipolytic Activity in Old Animals — F. L. Leites	464	114
METHODS		
Modification of Nauta's Method — I. A. Zambrzhitskii	468	119
A Method for the Study of Renal Filtration — A. K. Mashkeev, B. M. Mirzoev, Yu. E. Vel'tishchev, and M. P. Matveev	471	121
A Surgical Approach to the Stellate Ganglion — S. P. Semenov	474	124

Available From Consultants Bureau

DOKLADY

BIOLOGICAL SCIENCES SECTIONS

*A translation of all papers in the Biological Sciences Sections of the
Proceedings of the Academy of Sciences of the USSR*

(Russian Original Dated May-June, 1963)

Vol. 150, Nos. 1-6, pp. 559-840

November-December, 1963

CONTENTS

	PAGE	RUSS. ISSUE	RUSS. PAGE
BIOCHEMISTRY			
DNA-Dependent Enzymatic Synthesis of RNA in Synchronous Cultures of <i>Azotobacter vinelandii</i> . <u>G. N. Zaitseva</u>	559	1	176
Cardiac Glycosides of Plants of the Cruciferae Family: <i>Cheiranthus allionii</i> Hort. [<i>Erysimum marschallii</i> (Stark) Boiss] and <i>Erysimum marschallianum</i> Andr. in Bieb. <u>N. P. Maksyutina</u>	563	1	180
Biological Role of Non-Hemin Iron of Wheat Embryo. <u>A. A. Mutuskin</u> , <u>K. V. Pshenova</u> and <u>P. A. Kolesnikov</u>	567	1	184
Activity of the Transamination - Deamidation Reaction in Hyperoxia. <u>V. I. Shumskaya</u>	570	1	188
Photosynthetic and Phosphate Oxygen. <u>A. P. Vinogradov</u> , <u>V. M. Kutyurin</u> , <u>M. V. Uibekova</u> , <u>N. I. Zakharova</u> , and <u>I. K. Zadorozhnyi</u>	572	2	411
Oxidation of Nicotinamide-Adenine Dinucleotide by Peroxidase. <u>T. M. Ivanova</u> and <u>B. A. Rubin</u>	575	2	414
Soluble Ribonucleic Acid in the Developmental Cycle of <i>Azotobacter vinelandii</i> . <u>Singh Chanan</u> , <u>G. N. Zaitseva</u> , and <u>Ngo Ke Syong</u>	578	2	417
Changes in Protein and Nucleic Acid Metabolism of Animals Following Thermal Trauma. <u>T. L. Zaets</u> and <u>T. A. Borisova</u>	582	3	677
Products of Peroxidase-Catalyzed Oxidation and Riboflavin-Sensitized Photo-Oxidation of Ascorbic Acid in the Presence of Morin. <u>P. A. Kolesnikov</u> and <u>S. V. Zorá</u>	585	3	680
Electron-Microscopic Study of Coacervates. <u>A. I. Oparin</u> , <u>I. G. Stoyanova</u> , <u>R. B. Serebrovskaya</u> , and <u>T. A. Nekrasova</u>	588	3	684
Participation of Esterified and Nonesterified Forms of Protochlorophyll of Etiolated Sprouts in Formation of Chlorophyll a. <u>T. N. Godney</u> , <u>N. K. Akulovich</u> , and <u>E. V. Khodasevich</u>	590	4	920
Kinetics of Specific Activities of Chlorophylls a and b when Light is Excluded from Plants which Have Assimilated $C^{14}O_2$. <u>A. A. Shlyk</u> and <u>G. A. Vetokhina</u>	594	4	924
Effect of Gamma-Irradiation on the Growth and Nucleic Acid Content of Onions. <u>N. P. Korabl'eva</u> , and <u>L. V. Metlitskii</u>	598	5	1153
Chlorophyll-Sensitized Oxidoreductive Transformations of Benzylnicotinamide and Pyridine Nucleotides. <u>A. A. Krasnovskii</u> , <u>G. P. Brin</u> , and <u>N. N. Drozdova</u>	601	5	1157
Content of Free Amino Acids in the Cerebral Hemispheres During Stimulation of the Central Nervous System. <u>N. S. Nilova</u>	605	5	1161
Alkali-Stable Nucleotide-Peptide Fragments of Ribosomal Ribonucleic Acid of <i>Escherichia coli</i> . <u>A. A. Bogdanov</u> , <u>E. G. Antonovich</u> , <u>G. V. Terganova</u> , and <u>M. A. Prokof'ev</u>	608	6	1373
Bonding of RNA to Protoplasmic Lipids. <u>V. G. Kondarev</u> and <u>R. R. Akmetov</u>	610	6	1375

Available From Consultants Bureau

(Continued)

DOKLADY AKADEMII NAUK SSSR
BIOLOGICAL SCIENCES SECTION
 Vol CL, Nos 1-6, 1963

CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
Reversible Photochemical Reaction of Chlorophyll, Bacteriochlorophyll, and Bacterio- viridin with Quinone and Oxygen in Alcohol-Glycerol Solution. <u>A. A. Krasnovskii</u> and <u>N. N. Drozdova</u>	613	6	1378
Biochemical Nature of Wound Reactions and Their Application to the Enhancement of Resistance of Potatoes to Microorganisms. <u>L. V. Metlitskii</u> , <u>E. N. Mukhin</u> , and <u>N. P. Morozova</u>	617	6	1382
Effect of Etiolation and of ATP on Incorporation of C^{14} -Tyrosine Into Bean Leaf Chloro- plast Proteins. <u>E. E. Khavgin</u> and <u>Zh. A. Medvedev</u>	620	6	1385
BIOPHYSICS			
The Reaction of Mouse Spermatogenic Epithelium to Prolonged Chronic Irradiation with Small Doses of Co^{60} Gamma Rays	623	1	170
The Dependence of the Photosensitizing Activity of Chlorophyll, Adsorbed on Caprone, on the Surface Concentration. <u>G. G. Komissarov</u> , <u>V. A. Gavrilova</u> , <u>L. I. Nekrasov</u> , <u>N. I. Kobozev</u> , and <u>V. B. Evstigneev</u>	627	1	174
Extinguishing of Fluorescence of Carotinoid Adsorbed Substances. <u>G. N. Lyalin</u> , <u>G. I.</u> <u>Kobyshev</u> , and <u>A. N. Terenin</u>	629	2	407
A Comparative Evaluation of the Effectiveness of Mercamine's (Beta-Mercaptoethylamine) Protective Action Against Single-Dose and Fractionated Irradiation. <u>S. N. Aleksandrov</u> and <u>K. F. Galitskaya</u>	633	3	665
Mechanism for the Radiobiological Labilization of Hemoglobin. <u>E. A. Bauman</u>	636	3	668
The Effect of Somatotrophic Hormone of the Anterior Lobe of the Hypophysis on Bone under Conditions of Irradiation. <u>E. A. Ivanova</u>	639	3	671
Incidence of Pulmonary Adenomas in Mice Relative to the Dose of External Gamma Irradiation. <u>R. V. Smimov</u>	643	3	675
Spontaneous Induction of Luminescence in Plants under Aerobic and Anaerobic Conditions. <u>R. A. Gasanov</u> , <u>T. G. Namedov</u> , and <u>B. N. Tarurov</u>	645	4	913
Reduction of Resistance to Tumors Long After Exposure to Radiation. <u>N. V. Kozlova</u>	648	4	916
A Comparison of the Injurious Effects of Fast Neutrons and X Rays on Mouse Testicles. <u>M. D. Pomerantseva</u> and <u>L. K. Ramaiya</u>	652	6	1370
CYTOLOGY			
Chromosome Lysis at Spindle Blockage. <u>B. N. Sidorov</u> and <u>N. N. Sokolov</u>	655	3	653
Ultraviolet Fluorescence of Blood Cells of Patients with Leukoses. <u>L. M. Rozanova</u> , <u>I. Ya. Barskii</u> , and <u>E. M. Brumberg</u>	659	4	907
Ultrastructure of the Nucleolus in the Brown-Pearce Tumor in Relation to Vital Function. <u>N. P. Dmitrieva</u>	661	5	1145
The Nature of the Ultraviolet Fluorescence of Cells. <u>E. M. Brumberg</u> , <u>I. Ya. Barskii</u> , <u>N. A. Chernogryadskaya</u> , and <u>M. S. Shudel'</u>	665	6	1256
ECOLOGY			
Effect of Water Temperature, Age and Sex of Fish on Their Absorption and Excretion of C^{14} . <u>G. V. Fedorova</u>	669	1	168
The Influence of Ultraviolet Light on Microbiocoenoses of Marine Protozoa. <u>M. M. Kamshilov</u>	671	6	1363
ENDOCRINOLOGY			
Changes in the Thyrotrophic Properties of the Amphibian Hypophysis in Ontogenesis and After Extirpation of the Preoptic Region of the Diencephalon. <u>A. A. Voitkevich</u> . . .	674	1	221
Effect of the Neurosecretion on the Cytological Structure of a Pituitary Transplant. <u>G. A. Ovchinnikova</u>	677	2	445
Available From Consultants Bureau	(Continued)		

DOKLADY AKADEMII NAUK SSSR
BIOLOGICAL SCIENCES SECTIONS
Vol CL, Nos 1-6, 1963
CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
EVOLUTIONARY MORPHOLOGY			
The Development of Preoptic Connections of the Palatoquadrate Cartilage in <i>Rana sibiricus</i> . <u>N. S. Lebedkina</u>	682	1	199
EXPERIMENTAL MORPHOLOGY			
The Formation of Excess Interstitial Cells as an Index of the Intensity of Cell Division in the Morphogenesis of <i>Campanularia integra</i> and <i>Campanulina lacerata</i> . <u>L. V. Belousov</u>	686	3	690
Factors Governing Recovery of the Ability of Axolotls to Regenerate Limbs After Its Suppression by X-Rays. <u>L. V. Polezhaev</u> , <u>N. A. Tepits</u> , and <u>S. Ya. Tuckova</u> . . .	690	3	694
Closure of Defects in the Cranial Bones and Dura by Homotransplantation of Lyophilized Dura and Bone Chippings. <u>A. I. Matveeva</u> and <u>V. A. Mitrofanova</u>	694	4	934
Histochemical Detection of Protein in the Microstructures of the Intact Myocardium and After Experimental Trauma to the Heart. <u>S. S. Saidrasulov</u>	698	4	938
Relationship Between the Ganglion-Cell Layer of the Retina and Regeneration of the Lens from a Rudiment. <u>V. V. Popov</u> and <u>E. I. Panteleev</u>	703	5	1164
GENETICS			
Kinetics of the Mutagenic Action of Ultraviolet Light on the Extracellular Bacteriophage ϕ of <i>E. coli</i> . <u>A. S. Krivinskii</u> , <u>G. B. Zavit'skii</u> , <u>V. I. Ivanov</u> , and <u>A. M. Lysenko</u>	707	2	399
The Action of Chemical Agents on Manifest Signs of Mutation in <i>Drosophila melanogaster</i> . <u>P. G. Svetlov</u> and <u>G. F. Korsakova</u>	711	2	403
An Embryological Study of Cross Pollination of Diploid and Tetraploid Buckwheat. <u>E. A. Zhebrak</u>	714	3	657
Experimental Mutations of the Vegetative Organs of Trees. <u>G. F. Privalov</u>	718	3	661
Photoperiodism of Diploid and Tetraploid Coriander. <u>N. N. Konstantinov</u> and <u>E. A. Zhebrak</u>	722	5	1149
HISTOLOGY			
Changes in Activity of Lipolytic Enzymes under the Influence of Novocaine Electrophoresis in Experimental Atherosclerosis. <u>F. L. Leites</u> , <u>L. A. Dolina</u> , and <u>N. A. Kaplun</u>	725	4	909
The Activity of Dehydrogenase and Cell Function in Different Parts of the Rat Nephron. <u>Yu. V. Natochin</u>	730	6	1359
MICROBIOLOGY			
Dependence of the Restoration of Irradiated Cells on the Type of Energy Metabolism. <u>L. A. Seliverstova</u> and <u>M. N. Meisel</u>	734	6	1366
PHYSIOLOGY			
The Preautomatic Pause Resulting from Suppression of the Automatism of the Ventricular Pacemakers by Fast Rhythms of Stimulation. <u>E. B. Bab'skii</u> , <u>L. S. Ul'yaninskii</u> , and <u>I. L. Kosharskaya</u>	737	1	203
The Effect of Insulin on Absorption of Glucose by Embryonic Muscles. <u>L. G. Leibson</u> and <u>E. M. Plisetskaya</u>	740	1	207
Antidotal Actions of Cortisone on Venom of <i>Ancistrodon halys</i> Pallas and of Hydrocortisone on Venom of <i>Vipera lebetina</i> L. <u>A. A. Pchelkina</u> , <u>I. A. Val'tseva</u> , <u>E. N. Pavlovskii</u> , <u>F. F. Talyzin</u> , and <u>I. B. Yurkova</u>	743	1	211
The Electrical Activity of Single Cortical Neurons. <u>T. P. Shlyafar</u>	746	1	214
The Effect of Vitamin B ₁₂ and Pyrogenal on the Intensity of Protein Synthesis in Injured Heart Muscle. <u>M. P. Yavich</u>	749	1	217

Available From Consultants Bureau

(Continued)

DOKLADY AKADEMII NAUK SSSR
BIOLOGICAL SCIENCES SECTION
Vol CL, Nos 1-6, 1963
CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
The Velocity of Conduction of Excitation in the Myocardium and the Cardiac Rhythm. <u>E. B. Babitskii</u> and <u>E. A. Donskikh</u>	753	2	424
Duration of Preservation of the Toxic Properties of the Venom of the Indian Cobra (<i>Naja tripudians</i> Merr.). <u>E. N. Pavlovskii</u> , <u>A. A. Pchelkina</u> , <u>K. F. Talyzin</u> , and <u>F. F. Talyzin</u>	756	2	428
Stimulation of Proliferation of the Nerve Cells of the Mammalian Cerebral Cortex. <u>L. V. Polezhaev</u> and <u>E. N. Karnaukhova</u>	758	2	430
Functional Characteristics of the Neurons of the Visual Centers. <u>G. D. Smirnov</u> and <u>P. Z. Mazurskaya</u>	763	2	434
Investigation of Carious Changes in Teeth and Indices of Phosphorus and Calcium Metabolism in Albino Rats. <u>Yu. A. Fedorov</u>	767	2	438
Evolution of the Neurohumoral Regulation of Excitation in the Interneuronal Synapses of the Brain. <u>V. S. Sheveleva</u>	770	2	441
The Electrocorical Dynamic Stereotype and the Conditions for its Prolonged Mani- festation. <u>S. A. Karazina</u>	774	3	698
The Role of Blocking of Sulfhydryl Groups in the Mechanism of Action of the Cardiac Glucosides. <u>F. Z. Meerson</u> , <u>L. Yu. Sadovskaya</u> , and <u>L. A. Pogosyan</u>	777	3	702
The Effect of Electrical Stimulation of the Sinuauricular Node on Atrioventricular Conduction During Stimulation of the Vagus Nerve. <u>E. B. Babitskii</u> and <u>L. S. Ul'yaninskii</u>	780	4	942
The Effect of Cortical Depression on the Responses of the Lateral Geniculate Body. <u>P. P. Guston</u>	782	4	945
Reactive Inhibition of Mitotic Activity in the Corneal Epithelium of Hypophysectomized Rats. <u>S. S. Raitsina</u> and <u>V. N. Kashintseva</u>	786	4	949
Gaseous Environment Preferred by Albino Mice in an Oxygen and Carbon Dioxide Gradient. <u>I. S. Breslav</u>	788	5	1168
The Effect of Fatigue on the Permeability of the Blood-Brain Barrier. <u>M. M. Gromakovskaya</u> and <u>T. N. Dish</u>	791	5	1171
Conditions for Stabilization and Extinction of Electrocortical Temporary Connections. <u>S. A. Karazina</u>	794	5	1174
Effect of a Lipopolysaccharide from <i>B. paracoli</i> on the Circulating Leukocytes in Rabbits. <u>K. N. Klimova</u> and <u>A. F. Loktev</u>	797	5	1178
Prolonged Reversible Postoptokinetic Nystagmus. <u>V. P. Neverov</u>	801	5	1182
Activation of the EEG in Response to Light. <u>S. A. Karazina</u>	803	6	1397
Change in the Adrenalin Content of the Brain Produced by Aminasin. <u>Ya. A. Rosin</u> and <u>N. M. Chernavskaya</u>	806	6	1401
Rate of Differentiation of Inhibition During the Development of Complex Forms of Behavior in the Chimpanzee. <u>A. I. Schastnyi</u>	809	6	1404
PLANT PHYSIOLOGY			
Reaction of <i>Nicotiana</i> Species to Infection with Tobacco Downy Mildew. <u>M. F. Ternovskii</u> and <u>K. N. Dashkevva</u>	813	4	931
The Interaction of Gibberellic Acid and Derivatives of Phenoxyacetic Acid in Fiber Flax Plants. <u>S. M. Mashtakov</u> and <u>A. P. Volynets</u>	816	1	191
Characteristics of Respiration and Oxidation-Reduction Processes in Rice as Related to Nutrition. <u>N. N. Kharanyan</u>	820	1	195
The Effect of Ultrasound on Pine and Spruce Seed. <u>G. M. Kozubov</u> and <u>L. G.</u> <u>Ganyushkina</u>	823	2	421

Available From Consultants Bureau

(Continued)

DOKLADY AKADEMII NAUK SSSR
 BIOLOGICAL SCIENCES SECTION
 Vol CL, No 1-6, 1963
CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
The Action of Gibberellin on the Germination of the Seeds of Arboreal Plants. <u>M. G. Nikolaeva</u> and <u>V. G. Yudin</u>	825	3	686
The Dynamics of the Photoreaction of the Interconversion of Xanthophylls During Greening. <u>Z. M. Éidel'man</u> and <u>A. S. Khodzhaev</u>	829	4	928
A Study of the Free Amino Acids and Sugars in the Buds of the Grapevine During Both the Growing Period and Dormancy. <u>Iv. Moskov</u> , <u>M. Nikov</u> , and <u>L. Bozova</u>	832	6	1389
ZOOLOGY			
Types of Polychaete Larvae. <u>V. A. Sveshnikov</u>	836	6	1393

Available From Consultants Bureau

DOKLADY BIOLOGICAL SCIENCES SECTIONS

DOKLADY AKADEMII NAUK SSSR

(Russian Original Dated July-August, 1963)

Vol. 151, Nos. 1-6, pp. 841-1098

January-February, 1964

CONTENTS

	PAGE	RUSS. ISSUE	RUSS. PAGE
BIOCHEMISTRY			
Oligonucleotides of Ribonuclease Hydrolyzates of Transport RNA, Containing Minor Components. <u>T. V. Venkster, A. A. Baev, A. D. Mirzabekov, and V. I. Gorskova</u>	841	1	220
Birefringence of Solutions of Deoxyribonucleoprotein in an Electric Field. <u>E. I. Golub and G. A. Dvorkin</u>	845	1	224
Mechanism of the Photosensitizing Action of Chlorophyll. <u>V. B. Evstigneev, V. A. Gavrilova, and I. G. Savkina</u>	848	1	227
Free Gallic Acid in Tea Leaves. <u>M. N. Zaprometov, and V. Ya. Bukhlaeva</u>	851	1	231
Oxidation-Reduction Processes in Coacervate Droplets. Dehydrogenation of DPNH ₂ (NADH ₂). <u>A. I. Oparin, K. B. Serebrovskaya, and S. A. Pantskhava</u>	853	1	234
Mechanism of Thermal Denaturation of Deoxyribonucleic Acid. <u>T. I. Tikhonenko, G. A. Perevertailo, E. N. Dobrov, and F. L. Kiselev</u>	856	1	237
Effect of Puromycin on Incorporation of Amino Acids into Lipids and Proteins of Chloroplasts. <u>N. M. Sisakyan, É. N. Bezinger, and M. I. Molchanov</u>	860	2	449
Isolation and Properties of Bean Chloroplast Lipoprotein. <u>É. N. Bezinger, M. I. Molchanov, A. P. Kotovskaya, and N. M. Sisakyan</u>	863	3	722
Role of Product Inhibition of Enzymes under Open System Conditions. <u>G. D. Dechev, L. N. Moiseeva, A. G. Pasynskii</u>	865	3	725
Determination of Higher Alcohols in Brandy Spirit by Means of Gas-Liquid Chromatography. <u>I. A. Egorov, A. K. Rodopulo, and A. F. Pisarnitski</u>	868	3	729
Synthesis of Carbohydrates in Plants. <u>E. A. Boichenko and T. M. Udel'nova</u>	870	4	959
Detection by a Biochemical Method of Choline Receptor Substances in Poikilotherm and Homeotherm Animals. <u>S. N. Nistratova and T. M. Turpaev</u>	872	4	961
Availability of Mitochondrial ATP for the Phosphofructokinase Reaction of Glycolysis. <u>E. A. Pinus and N. M. Sisakyan</u>	874	4	963
Chemical Nature of So-Called Salep-Mannan. <u>B. N. Stepanenko and N. K. Shcherbukhina</u>	878	4	967
Chemical Transformations of Deoxyribonucleic Acid Due to the Action of Ultrasonic Vibrations. <u>I. E. Élpiner and F. I. Braginskaya</u>	882	4	971
Characteristics of the Dark Reaction of Interconversion of Xanthophylls. <u>N. V. Bazhanova and D. I. Sapozhnikov</u>	885	5	1219
Ability of Uridine Diphosphate Glucose Analogs to Participate in Sucrose Biosynthesis. <u>N. D. Gabrielyan, M. A. Novikova, and G. L. Zhdanov</u>	888	6	1453

Available From Consultants Bureau

(Continued)

DOKLADY AKADEMII NAUK SSSR
BIOLOGICAL SCIENCES SECTIONS
 Vol. CLI, Nos 1-6, 1963

CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
BIOPHYSICS			
Dynamics of Postradiation Recovery of Yeast Cells in Relation to γ -Ray Dose. <u>V. S. Barsukov, O. V. Malinovskii, and N. M. Mityushova</u>	891	1	209
Reparative Regeneration of Rat Liver After Local X Irradiation. <u>M. M. Kalashnikova</u>	894	1	213
An Investigation of the Protective Effect of Cystamine on Cells of Ehrlich's Ascites Carcinoma Irradiated in Vivo and in Vitro. <u>I. V. Nekrasova</u>	898	1	217
Effectiveness of Protection of Rabbit Spermatozoa against Genetic Injuries Caused by Irradiation in Vitro. <u>N. I. Nuzhdin and G. V. Nizhnik</u>	900	2	446
Effect of Some Protective Substances on Change in Reactivity of Tissue Sulphydryl Groups in Irradiated Animals. <u>L. I. Korchak and T. A. Speranskaya</u>	903	3	712
Cybernetic Control of Process of Reversible Hypothermia. <u>E. V. Maistrakh,</u> <u>I. V. Eremenko, G. I. Il'yutkin, and V. A. Konstantinov</u>	905	3	714
Permeability of Hematoencephalic Barrier to Inorganic Phosphate in Acute Radiation Sickness. <u>D. A. Chetverikov and S. V. Gasteva</u>	909	3	718
Mechanisms of Muscle Contraction (from X-Ray Data). <u>L. A. Mel'nikov,</u> <u>L. L. Razumova, B. K. Lemazhikhin, and G. M. Frank</u>	912	4	955
Optical Rotatory Dispersion of Deoxyribonucleic Acid Extracted from T-2 Bacteriophage. <u>G. A. Dvorkin, E. I. Golub, L. P. Gorbachev,</u> <u>L. G. Koreneva, and M. I. Mekshenkov</u>	918	5	1211
Diurnal Dynamics of Electrical Activity of Plants under a Functional Load. <u>A. D. Semenenko, M. A. Khvedelidze, and A. D. Semenenko</u>	920	5	1215
Regenerative Processes in Duodenal Mucosa After Radiation Injury. <u>I. A. Chalisov and L. B. Berlin</u>	924	6	1450
BOTANY			
Electron Microscopic Investigation of Sunflower Seeds and the Accumulation of Reserves. <u>I. N. Sveshnikova and Yu. P. Bolyakina</u>	928	5	1222
CYTOLOGY			
Certain New Data on the Interrelationship between Mitochondria and the Canals of the Endoplasmic Reticulum. <u>Ya. Yu. Komissarchik and V. F. Mashanskii</u>	932	1	198
Investigation of the Mitotic Cycle of Mouse Bone-Marrow Cells by Radioautography. <u>A. I. Zosimovskaya</u>	936	3	687
Cytochemical Properties of the Interphase Nuclei of Cells Having Different Physiological Functions. <u>N. L. Delone and A. N. Danilina</u>	940	5	1195
Stimulation of Cell Division by Dichloroacetyl Compounds. <u>G. L. Zhdanov,</u> <u>I. B. Sorokina, V. P. Mal'kova, M. A. Novikova, and A. V. Chestukhin</u>	944	5	1198
Radioautographic Investigation of the Duration of the Stages in the Mitotic Cycle of Cells of Loose, Shapeless Connective Tissue in Normal Conditions. <u>N. G. Khrushchov</u>	946	5	1201
Cytochemistry of the Blepharoplast of <i>Trypanosoma (Schizotrypanum) cruzi</i> <u>V. D. Kallinikova and G. I. Roskin</u>	948	6	1437
ECOLOGY			
Variation in the Number of Bacteria in Experimental Microbiocenoses Under the Effect of Ultraviolet Rays. <u>M. M. Kamshilov and É. S. Fishkova</u>	953	1	206
The Determination of Transparency Among Planktonic Organisms and Its Protective Significance. <u>V. N. Greze</u>	956	2	435

Available From Consultants Bureau

(Continued)

DOKLADY AKADEMII NAUK SSSR
BIOLOGICAL SCIENCES SECTIONS
Vol CLI, Nos 1-6, 1963

CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
Threshold Concentration of Oxygen in Water for Fish at Different Temperatures. <u>T. I. Privol'nev</u>	959	2	439
On the Early Euryhalinity of Acipenseridae and the Adaptive Function of Chloride-Secreting Cells in Their Gills. <u>L. S. Chusovitina</u>	961	2	441
Effect of <u>Rapana bezoar</u> Linné (Mollusca, Muricidae) on The Black Sea Fauna. <u>E. I. Drapkin</u>	964	3	700
The Ecological Regulation of the Seasonal Cycle in the Malarial Mosquito <u>Anopheles bifurcatus</u> L. (Diptera, Culicidae). <u>E. B. Vinogradova</u> , ...	967	5	1204
The Indian Cuckoo (<u>Cuculus M. micropterus</u> Gould)—A Nest Parasite of the Amur Shrike (<u>Lanius cristatus confusus</u> Stegm.). <u>I. A. Neifeid'i</u> , ...	970	6	1446
EMBRYOLOGY			
Comparison of the Dynamics of Invagination of the Chordomesoderm in Sturgeon and Axolotl Embryos. <u>G. M. Ignat'eva</u>	973	6	1466
MORPHOLOGY			
The Role of the Lenticular Epithelium in the Induction of Tissue of the Iris and Ciliary Body— <u>O. G. Stroeve</u>	977	2	464
GENETICS			
The Genetic Aftereffects of the Action of Fast Neutrons on the Sexual Cells of Male Mice. <u>M. D. Pomerantseva</u> and <u>L. K. Ramaiya</u>	981	1	203
The Effect of Pollen Quantity on the Fertilization of <u>Mirabilis jalapa</u> . <u>O. M. Gavrilova</u> , ...	984	6	1444
HISTOLOGY			
The Fetal Porcine Adrenal Cortex. <u>Z. S. Katsnel'son</u> , <u>E. M. Ledyeva</u> , and <u>V. P. Aleksandrova</u>	986	1	201
A Histochemical Study of the Activation of Lipolytic Enzymes in Response to Local Injection of Cholesterol. <u>V. I. Deribas</u>	989	3	691
Nucleoprotein Changes in the Spinal Ganglia of Irradiated Animals. <u>V. M. Lavrinenko</u> . Alkaline Phosphatase in Peritoneum and Muscle Fibers of Abdominal Wall of Rabbit. <u>A. A. Savinovskaya</u>	992	3	694
The "Clear" Cells of the Thyroid Gland. <u>M. P. Gorbunova</u>	996	3	697
	1000	6	1441
MICROBIOLOGY			
The Transfer of Biochemical Properties in Bacteria by Means of Transformation. <u>A. A. Imshenetskii</u> , <u>A. N. Partskaya</u> , and <u>K. Z. Perova</u>	1004	2	443
Composition of <u>Torula utilis</u> Cells During Synchronous Multiplication. <u>I. A. Khmel'</u>	1007	3	704
Effect of some Reductants on Growth of Green Sulfur Bacteria and Their Synthesis of Bacterioviridin at Different Light Intensities. <u>V. N. Shaposhnikov</u> , <u>R. M. Balitskaya</u> , and <u>E. N. Kondra'eva</u>	1010	3	708
Biochemical Changes in the Metabolism of <u>Staphylococcus aureus</u> 209P Related to Its Resistance to Tetracycline. <u>V. K. Plakunov</u>	1014	4	952
Some Interrelationships of Structure and Mechanism of Action in Several Tetracycline Antibiotics. <u>V. K. Plakunov</u>	1017	5	1207
Interneuronal Synapses of the Inferior Colliculi. <u>E. E. Granstrem</u>	1021	4	975
PARASITOLOGY			
Destruction of Vertebrate Erythrocytes in the Alimentary Canal of Bloodsucking Arthropods. <u>Yu. S. Balashov</u>	1024	6	1470

Available From Consultants Bureau

(Continued)

DOKLADY AKADEMII NAUK SSSR
BIOLOGICAL SCIENCES SECTION
Vol. CL1, Nos 1-6, 1963

CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
A Study of the Developmental Cycle in the Cestode <u>Raillietina (Skrjabinia) fedjuschina</u> Skutar, 1963—A Parasite of the Domestic Fowl. <u>I. G. Skutar</u>	1029	6	1474
Hyaluronidase in the Various Stages of the Life History of <u>Ichthyophthirius multifiliis</u> , <u>A. V. Uspenskaya</u>	1031	6	1476
PHYSIOLOGY			
The Tonic Function of the Respiratory Muscles. <u>D. A. Kocherga</u> and <u>A. A. Bogomolets</u> . Characteristics of Gas Exchange in the Caterpillar of the Chinese Oak Silkworm Moth During Ecdysis. <u>D. V. Petrova</u> , ...	1034	2	468
Induced Potentials in the Cerebral Cortex of Hibernating Animals. <u>M. B. Shtark</u> and <u>V. P. Danilyuk</u> , ...	1037	3	737
Blood Supply to the Heart and the Demand for Oxygen by the Myocardium During Transverse Accelerations. <u>A. D. Voskresenskii</u> , <u>A. A. Kiselev</u> and <u>M. I. Bryuzgina</u>	1040	3	740
Content of Nonesterified Fatty Acid in the Plasma of Rats Subjected to Accelerations. <u>A. A. Gyurdzhian</u> , <u>M. A. Lomova</u> , and <u>L. A. Radkevich</u>	1044	4	978
Paramagnetic Electron Resonance Induced in the Retina by Light. <u>M. A. Ostrovskii</u> and <u>L. P. Kayushin</u> , ...	1047	4	982
Recruiting Response in Dogs During the Formation of a Conditioned Reflex, <u>G. T. Sakhiulina</u> and <u>G. Kh. Merzhanova</u> , ...	1050	4	986
Vagal Escape and the Tarchanoff-Puelma Phenomenon, <u>E. B. Babskii</u> and <u>L. S. Ulyaninskii</u>	1053	4	989
Types of Hemoglobin in Sturgeon Fry, <u>L. F. Golovanenko</u> , ...	1057	5	1232
Effect of Stimulating the Peripheral End of the Splanchnic Nerve on the Secretory Function of the Adrenal Cortex. <u>V. M. Rodionov</u> , <u>L. V. Orlova</u> , <u>L. I. Tuul'</u> , and <u>S. P. Klimova</u>	1060	5	1236
Electrical Activity of Single Neurons of the Somatosensory Cortex. <u>T. D. Dzhavrisvili</u> , ...	1062	5	1238
	1065	6	1462
PLANT PHYSIOLOGY			
The Dependence on Light of the Oxygen Absorption of Chloroplasts, <u>G. S. Grishina</u> and <u>N. P. Voskresenskaya</u>	1069	2	452
Variations in the Content of Acid-Soluble Organic Phosphorous Compounds in Plant Tissue During Water Deficiency. <u>V. N. Zholkevich</u> and <u>A. Ya. Rogacheva</u> , ...	1073	2	456
An Investigation of Callus Formation in Certain Trees and Shrubs by the Method of Tissue Culture in Vitro. <u>E. A. Bychenkova</u> , ...	1077	3	732
The Range of Selectivity of Plants for the Uptake of Mineral Elements, <u>D. B. Vakhmistrov</u> and <u>Z. I. Zhurbitskii</u> , ...	1081	5	1228
Distribution of Sr^{90} and Ru^{106} in the Main Organs of Pine. <u>G. I. Makhonina</u> , <u>P. I. Yushkov</u> , <u>M. Ya. Volkova</u> , and <u>N. V. Timofeev-Resozskii</u> , ...	1085	6	1456
ZOOLOGY			
A New Method for Observing Sensillae of Trematode Larvae and the Systematic Importance of These Structures. <u>T. A. Ginetsinskaya</u> and <u>A. A. Dobrovol'skii</u>	1087	2	460
The Leech Fauna of the Irkutsk Reservoir in Relation to the Problem of the Immiscibility of the Baikal and the Common Palearctic Faunae. <u>E. I. Lukin</u> , ...	1090	5	1225
The Process of Division of <u>Trichodina truttae</u> Mueller (Infusoria, Peritrichia). <u>E. A. Bogdanova</u> , ...	1092	6	1458

Available From Consultants Bureau

(Russian Original Vol CLV, Nos 1-6, 1964)

Vol. 5, No. 2

March-April 1964

TABLE OF CONTENTS

	Russian page nos.	Page
Aĭzenberg, L. A. <i>Integral representations of holomorphic functions of several complex variables</i>	(9-12)	307
Al'ber, S. L. <i>Homologies of the space of nonoriented loops and their application to the calculus of variations in the large</i>	(13-16)	312
Berman, D. L. <i>Theory of linear polynomial operations on topological groups</i> ..	(17-19)	317
Vainberg, B. R. <i>Hypoelliptic equations in the whole space and the principle of limiting absorption</i>	(20-23)	321
Višik, M. I. and Eskin, G. I. <i>Boundary value problems for general singular integral equations in a bounded domain</i>	(24-27)	325
Gol'denšteĭn, L. S. <i>Tests for one-sided inverses of functions of several isometric operators and their applications</i>	(28-31)	330
Kral, Josef (Král, Josef) <i>Angular limit values of integrals of Cauchy type</i>	(32-34)	335
Kratko, M. I. <i>Algorithmic unsolvability of the problem of recognition of completeness for finite automata</i>	(35-37)	338
Krivov, V. V. <i>Extremal quasiconformal mappings in space</i>	(38-40)	341
Ljubič, Ju. I. <i>Estimates of the number of states that arise in the determination of a nondeterministic autonomous automaton</i>	(41-43)	345
Pimenov, R. I. <i>On the foundations of geometry</i>	(44-46)	349
Rymarenko, B. A. <i>Monotonic entire functions of exponential type</i>	(47-49)	353
Sobolevskii, P. E. <i>The use of fractional powers of operators in studying the Navier-Stokes equations</i>	(50-53)	356
Sprindžuk, V. G. <i>Further remarks on a conjecture of Mahler</i>	(54-56)	361
Cišang, H. (Zieschang, H.) <i>Automorphisms of planar groups</i>	(57-60)	364
Arhangel'skiĭ, A. <i>Factor-mappings of metric spaces</i>	(247-250)	368
Bancuri, R. D. and Džanašija, G. A. <i>Convolution equations for a half-axis</i>	(251-253)	372
Bauer, F. V. (Bauer, F. W.) <i>Universal homotopy groups</i>	(254-257)	376
Ivanov, L. D. <i>Smooth mappings of the space R_n into R_1</i>	(258-261)	380
Ljubič, Ju. I. <i>Conditions for the denseness of the initial value manifold of an abstract Cauchy problem</i>	(262-265)	384
Maikov, E. V. <i>r-continuity and r-differentiability of a functional</i>	(266-269)	388
Marcun, N. F. <i>Certain interference types for entire functions of exponential type</i>	(270-272)	393
Macaev, V. I. <i>Some theorems on the completeness of root subspaces of completely continuous operators</i>	(273-276)	396
Morgunov, B. I. <i>Stationary resonance behavior of certain rotary motions</i>	(277-280)	400
Petrenko, V. P. <i>Growth of a meromorphic function along a half-line</i>	(281-284)	405

Available From American Mathematical Society

Soviet Mathematics - Doklady

Vol V, No 2

(Continued)

CONTENTS (Continued)

	Russian page nos.	Page
Tersenov, S. A. <i>A problem with data given on a line of degeneracy for a system of hyperbolic equations</i>	(285-288)	409
Tkačenko, V. A. <i>Spectral analysis of the one-dimensional Schrödinger operator with a periodic complex-valued potential</i>	(289-291)	413
Calenko, M. S. <i>Correspondences over a quasi-exact category</i>	(292-294)	416
Agranovič, M. S. <i>General boundary value problems for integro-differential elliptic systems</i>	(495-498)	419
Askerov, N. G., Kreĭn, S. G. and Laptev, G. I. <i>A class of non-selfadjoint boundary value problems</i>	(499-502)	424
Biluta, P. A. <i>Some extremal problems in the class of mappings which are quasiconformal in the mean</i>	(503-505)	428
Birman, M. Š. and Ėntina, S. B. <i>A stationary approach in the abstract theory of scattering</i>	(506-508)	432
Veĭc, B. E. <i>Some characteristic properties of unconditional bases</i>	(509-512)	436
Garkavi, A. L. <i>Approximative properties of subspaces with finite defect in the space of continuous functions</i>	(513-516)	440
Grepačevskaja, L. V. <i>Absolute summability by the methods of Cesàro, Riesz and Zygmund</i>	(517-520)	444
Žižiašvili, L. V. <i>Conjugate functions of two variables and conjugate double trigonometric series</i>	(521-523)	448
Ovsepjan, S. G. <i>The first boundary value problem for certain differential equations with constant coefficients</i>	(524-527)	452
Pokazeev, V. I. <i>A certain representation of generalized analytic automorphic functions</i>	(528-531)	457
Sergeev, M. I. <i>Completely FN-factorable groups</i>	(532-534)	461
Smirnov, D. M. <i>Generalized solvable groups and their group rings</i>	(535-537)	465
Tersenov, S. A. <i>The Riemann-Hilbert problem for a system of equations degenerating at the boundary</i>	(538-541)	468
Baranovič, T. M. <i>Free decompositions in the intersection of primitive classes of algebras</i>	(727-729)	473
Bicadre, A. V. <i>A particular case of the slant derivative problem for harmonic functions in three-dimensional regions</i>	(730-731)	477
Viten'ko, I. V. and Kostovskiĭ, A. N. <i>Determination of the principal indices of Laurent series</i>	(732-734)	479
Volkov, E. A. <i>Effective error estimates for net method solutions of the Dirichlet problem for Laplace's equation on polygons</i>	(735-738)	483
Kordzadze, R. A. <i>The general boundary value problem with a shift for a second-order equation of elliptic type</i>	(739-742)	488
Kružkov, S. N. <i>The Cauchy problem in the large for nonlinear equations and for some quasilinear systems of the first order with several variables</i>	(743-746)	493
Krylov, N. V. <i>On the existence of ϵ-optimal homogeneous Markov strategies for a directed chain</i>	(747-750)	497
Kuratovski, K. (Kuratowski, K.) <i>Characterization of regular lattices by means of the exponential topology</i>	(751-752)	502
Markus, A. S. <i>Some criteria for the completeness of a system of root vectors of a linear operator and for the summability of series in this system</i>	(753-756)	505
Available From American Mathematical Society	(Continued)	
Soviet Mathematics - Doklady		
Vol V, No 2		

DOKLADY AKADEMII NAUK SSSR
SOVIET MATHEMATICS
 Vol CLV, Nos 1-6, 1964
 CONTENTS (Continued)

	Russian page nos.	Page
Popov, V. I. <i>Starlikeness of arcs of level lines under univalent conformal mappings</i>	(757-760)	510
Portnov, V. R. <i>Two imbedding theorems for the $L_{p,b}^{(1)}(\Omega \times R_+)$ space and their applications</i>	(761-764)	514
Solomencev, E. D. <i>A theorem of Phragmén-Lindelöf type for harmonic functions in space</i>	(765-766)	518
Halilov, Z. I. <i>A linear control problem in Banach space</i>	(767-770)	520
Štraus, A. V. <i>The multiplicity of the spectrum of a selfadjoint ordinary differential operator</i>	(771-774)	524
Žileikin, Ja. M. <i>Approximate solution of the Dirichlet problem for the Laplace equation</i>	(999-1002)	528
Kemhadze, Š. S. <i>Quasi-nil. . . groups</i>	(1003-1005)	532
Nersesjan, A. B. <i>On the theory of Volterra integral equations</i>	(1006-1009)	536
Novikov, S. P. <i>Foliations of codimension 1 on manifolds</i>	(1010-1013)	540
Poljakov, V. Z. <i>Open mappings of proximity spaces</i>	(1014-1017)	545
Sandberg, V. Ju. <i>The metrization of Lipschitz spaces</i>	(1018-1021)	549
Vagabov, A. I. <i>Conditions for the correctness of one-dimensional mixed problems for hyperbolic systems</i>	(1247-1249)	553
Kagan, A. M. and Šalaevskii, O. V. <i>The Behrens-Fisher problem: the existence of similar regions in the algebra of sufficient statistics</i>	(1250-1252)	556
Kadec, M. I. <i>The exact value of the Paley-Wiener constant</i>	(1253-1254)	559
Kogalovskii, S. R. <i>The relation between finitely-projective and finitely-reductive classes of models</i>	(1255-1257)	562
Ladyženskaja, O. A. and Ural'ceva, N. N. <i>Hölder continuity of solutions and of their derivatives for linear and quasilinear elliptic and parabolic equations</i>	(1258-1261)	565
Linnik, Ju. V., Romanovskii, I. V. and Sudakov, V. N. <i>A nonrandomized homogeneous test in the Behrens-Fisher problem</i>	(1262-1264)	570
Moroz, B. Z. <i>Continuability of the scalar product of Hecke's series for two quadratic fields</i>	(1265-1267)	573
Ilmyrova, N. A. <i>On polynomials with small prime divisors</i>	(1268-1271)	576
Partial table of contents for the next issue (Vol. 5, no. 3, May-June, 1964), Russian original		
Tom 156, nos. 1-5		580-a

Available From American Mathematical Society
 Soviet Mathematics - Doklady
 Vol V, No 2

CONTENTS

EVALUATION OF TYPHOID VACCINES AND EFFECTIVENESS OF THE
VACCINATION

<i>J. Kostrzewski</i> : I. Principles, planning and organization of the study . . .	1
<i>B. Kopacka, A. Stubiccka</i> : II. S. typhi antibody pattern in the population of areas selected for the field trial of typhoid vaccines . . .	14
<i>M. Kruczałowa, B. Schillerowa</i> : III. Production and preliminary character- ization of the vaccines for the field trial . . .	24
<i>D. Żołnierkowa, H. Przestalska</i> : IV. Preliminary evaluation of reactions to vaccination . . .	35
<i>W. Magdził, L. Milewska</i> : V. Addendum to the work of <i>D. Żołnierkowa</i> and <i>H. Przestalska</i> : Preliminary evaluation of reactions to vaccination . . .	42
<i>Z. Brzeziński, Z. Gancarz</i> : VI. Reactions to vaccination with vaccines N, P, S and T in adults . . .	48
<i>R. Lutyński</i> : VII. Evaluation of the reactions to vaccination with vaccines N, P, S and T in children and young persons . . .	52
<i>B. Kopacka, A. Stubiccka</i> : VIII. Serologic response in persons immunized with various typhoid vaccines . . .	58
<i>J. Ładosz</i> : IX. The use of the phagocytic test for the evaluation of ef- fectiveness of vaccination against typhoid fever (Preliminary report) . . .	66
<i>J. Płachcińska</i> : X. The passive protection test in chick embryos with sera of human beings vaccinated with the N, P, S and T vaccines . . .	70
<i>J. Kostrzewski, J. Płachcińska, A. Gruzewski</i> : XI. Evaluation of immuno- genic potency of K, N, P, S and T vaccines with the active mouse- protection test with zymosan . . .	74
<i>P. Meisel, F. Rabczyńska, Z. Kudelski</i> : XII. Agglutinating antibodies in the sera of rabbits immunized with typhoid vaccines . . .	85
<i>Z. Kudelski, P. Meisel, F. Rabczyńska</i> : XIII. Evaluation of four typhoid vaccines with the active mouse-protection test . . .	92
Collective Work: XIV. Organization of the controlled vaccination trial and evaluation of the comparability of the groups of persons vaccinated with particular vaccines . . .	101
<i>J. Szeląg</i> : XV. The epidemic of typhoid fever at Legionowo in 1961 . . .	112
<i>J. Szeląg, Z. Mikulski</i> : XVI. An epidemic of typhoid fever in a quarter of a town included in the field trial area . . .	116
<i>W. Magdził</i> : XVII. Comparability of the groups of persons selected for vaccination with vaccines K, N, O, P, S and T one year after termi- nation of the vaccination . . .	124
Collective Work: XVIII. The typhoid incidence in the field trial area and the epidemiologic appraisal of the efficacy of the vaccines in the course of the first year after the vaccination . . .	130

Available From OTS 63-11414/1-2
PL-480

GEODEZIYA I AEROFOTOSIEMKA
No 4, 1963

CONTENTS

	English Page	Russian Page
L.G. LETOVALETSKY: A General Method for the Reduction of Directions and Lengths in Transformation from an Ellipsoid to a Plane on Orthodromic (Arc of a Great Circle) Correction Formulas . . .	183	3
S.V. MARFENKO: Experience in Highly Precise Geodetic Work during the Installation of a Seven-Bev Proton Synchrotron	187	13
A.S. FILOMENKO: Derivation of Formulas for Computing the Angles of Inclination and Zenith Distances in Optical Theodolites of the OT-02 Type	197	37
Z.S. KILIMOV: The Criteria of Negligible and Allowable Errors	199	43
B.G. Aleksandrov: Errors in Connecting Sides in a Simple Chain of Triangles Run between Two Fixed Stations	205	57
V.V. BAKANOVA: The Accuracy of Relief Representation on 1:2,000 Plans in a Stereo-Topographic Survey	212	75
G.S. BRONSHTEYN: Three-Group Adjustment of Networks of Two-Figure Geodetic Intersections by the Prof. A.I. Durnev Method	216	83
V.A. VELICHKO: Determination of the Type of Error Function and Analysis of the Accuracy of Measurements with Pulsed-Light Range Finders	222	95
V.V. KOTOV: A Simplified Method for Evaluating the Accuracy of Polygonometric Traverses	226	105
B.B. SERAPINAS: Solution of the Phase-Sonde Problem by the Selection Method	232	117
V.V. BROVAR: Solutions of the Molodenskiy Boundary Problem	237	129
B.N. RODIONOV: A Computer for Solution of the Formula for Course Changes in an Aerial Survey Strip	240	139
N. P. ZAKAZNOV: Experience with the Manufacture of Aspherical Surfaces for Optical Parts (Double-Concave Hyperboloids of Revolution and aspherics with Slight Curvature)	242	143
R.V. KRUPEN: Effect of the Image Magnification of a Contact Level on the Accuracy and Speed of Adjustment	245	151

Available From American Geophysical Union

TABLE OF CONTENTS

	English Page	Russian Page
G. M. Nikol'skiy: Energy of Short-Wave Solar Radiation in the Spectral Region $\lambda \leq 1100 \text{ \AA}$	643	793
S. M. Poloskov and A. Ye. Mikirov: Electrophotometry of a Selected Section of the Outer Solar Corona in the Visible Region of the Spectrum during the Total Solar Eclipse of February 15, 1961	650	803
S. N. Vernov, I. A. Savenko, P. I. Shavrin and L. V. Tverskaya: Structure of the Earth's Radiation Belts at a Height of 320 km.	657	812
N. A. Mityakov, E. Ye. Mityakova and V. A. Chrepovitskiy: Results of Radio Observations of "Cosmos 1" and "Cosmos 2" in the Crimea.	660	816
A. V. Gurevich and L. P. Pitayevskiy: Disturbances around a Body Moving in Plasma in the Diffusion Approximation.	666	823
A. I. Kuz'min, G. V. Skripin, P. A. Krivoschapkin and G. F. Krymskiy: Energy Spectrum of Diurnal Cosmic-Ray Variations and Diurnal Temperature at a Height of 20-40 km.	672	830
G. M. Artem'yeva, V. V. Bolikovich, Ye. A. Benediktov, L. M. Yerukhimov, M. A. Itkina and Yu. S. Korobkov: Results of Observations of Intensity Fluctuations of Discrete Sources at Low Frequencies.	676	835
V. I. Lazarev: Ionizing Radiation and Warming of the Upper Atmosphere.	681	841
A. D. Danilov and G. S. Ivanov-Kholodnyy: Experimental Data on the Magnitude of Energy Sources in the Ionosphere.	688	850
N. A. Mityakov and E. Ye. Mityakova: A Method for Investigation of the Ionosphere by the Ground Reception of Radio Signals from Artificial Earth Satellites.	694	858
V. M. Polyakov: Determination of the Electron Recombination Rate in the F ₂ -Layer from the Diurnal Ionization Variation.	702	868
B. N. Gershman: Appearance of Ionospheric Inhomogeneities in the F-Layer.	710	878
K. Sprenger and Yu. V. Kushnerevskiy: Some Properties of Inhomogeneities in the Lower Ionosphere according to Long-Wave Observations.	716	887
E. S. Kazimirovskiy: Horizontal Drift of Ionization Inhomogeneities in the Upper Ionosphere.	726	902
E. V. Sukhorukova: Space-Time Distribution of the Sporadic E _s -Layer at High Latitudes.	732	910
G. M. Khocholava: Anomalous Absorption in the Polar Cap resulting from Large Chromospheric Flares.	735	914
M. Shirmamedov: Anomalous Reflection Coefficient Values.	741	922
B. Ye. Bryunell: Electric Field of a Polar Magnetic Disturbance.	746	929
Yu. K. Chasovitin and L. Ya. Solchatova: The Dependence of Characteristics of the E _s -Layer on the Sensitivity of Receiving Apparatus.	752	938
V. I. Afanas'yeva: Families of Geomagnetic Storms during the International Geophysical Cooperation.	760	948
V. I. Afanas'yeva: Energy of Geomagnetic Storms of September 1957.	766	955
V. Ye. Kashprovskiy: Correlation between the Electrical Conductivity of Soils and Their Physical-Chemical Properties.	771	961
N. M. Rotanova: Conductivity and Size of the Nonconducting Layer in the Case of a Cylindrical Model of the Earth in Application to D _{st} Variations.	776	968
BRIEF COMMUNICATIONS		
V. M. Morozov: Some Results of Photoelectric Observations of Airglow Near $\lambda 5700 \text{ \AA}$	783	976
I. I. Dorman and L. Kh. Shatashvili: The Lunar-Diurnal Variation and the 27-Day Modulation of Cosmic-Ray Anisotropy.	786	979
Yu. A. Medvedev: Radio Emission from a Meteor Trail.	788	981
A. V. Sergeyev: A Possible Cause of Excitations of PP Pulsations.	790	983
Ya. S. Rodionov: Autocorrelation of Critical Frequency Fluctuations and Ionization Density.	792	985
Ye. M. Kovalevskaya: Computation by Electronic Computer of the Maximum Usable Frequency for Communication between Two Points.	796	991
V. D. Kokourov: Relationship between Some Ionospheric Characteristics and Geomagnetic Activity.	800	995
BIBLIOGRAPHY		
Annotations to Articles on Geomagnetism and Aeronomy Appearing in "Izvestiya Vysshikh Uchebnykh Zavedeniy, Radiofizika" (News of Institutions of Higher Learning, Radiophysics), Published by Gor'kiy University.	803	997

Available From American Geophysical Union

CONTENTS

Ruža Borisavljević, Franja Ebel, and Djuro Kusanović: The Application of Baker—Phillipoff's Formula for the Determination of Intrinsic Viscosity of Polymethyl Methacrylate and the Copolymer Dimethyl Itaconate — Styrene — — — —	5
Dušan B. Stevančević: Physico-Chemical Properties of 1-Phenyl-Tetrazole-5-Thiol — — — — —	15
M. S. Jovanović, M. M. Petrović, and M. B. Krstić: High-Frequency Alkalimetric Determination of Hydrazine Sulphate — —	25
V. B. Golubović and M. J. Ljuština: Complexometric Titration of Chromium (III) in the Presence of Aluminum, Calcium and Magnesium — — — — —	31
Ruža Borisavljević, Rastko I. Mamuzić, and Mihailo Lj. Mihailović: N-Benzoylphthalimide IV. Pyrolysis and Reaction with Phenylmagnesium Bromide — — — — —	39
Dj. M. Dimitrijević, Z. D. Tadić, and M. D. Muškatirović: Reactivity of Pyridinecarboxylic Acids. I. Reaction Kinetics of Picolinic, Nicotinic, and Quinolinic Acids, and α - and β - Methyl Esters of Quinolinic Acid with Diphenyldiazomethane in Ethanol — — — — —	47
Z. D. Tadić, Dj. M. Dimitrijević and M. Mišić: Reactivity of Pyridinecarboxylic Acid 1-Oxides. I. The Reaction of Pyridine Monocarboxylic Acid 1-Oxides and Dipicolinic Acid 1-Oxide with Diphenyldiazomethane — — — — —	59
J. Jančulev and B. Podolešov: Condensation Products of α - and β -Acetylpyridine with Ethyl Oxalate — — — — —	69
Milan O. Mirić and Zorica V. Cupić: Fatty Materials From the Nut Seed <i>Juglans Regia</i> L in the Process of Germination — —	75
J. J. Bojanović, Lj. M. Sevaljević, M. O. Corbić: The Effect of Insulin on the Metabolism of Proteins, Lipids and Glucides. VII. Polarographic Activity of Blood Serum Proteins in Schizophrenic Patients, in Deep Hypoglycemic coma Effected by Insulin — — — — —	81
J. J. Bojanović, Lj. M. Sevaljević, D. B. Pavlović, and Dj. J. Panjević: Prealbumins, I. The Isolation and the Electrophoretic and polarographic Characterization of Prealbumins in Guinea Pig and Dog Blood Plasma — — — — —	89
S. D. Radosavljević, M. D. Dragojević and O. Lj. Cuković: Combined Silicone Water Repellents — — — — —	101
B. Božić and D. Mihajlović: The Process of Aging of Low Carbon Steel Followed by the Change in Electrical Resistance — —	111

Available From OTS 62-11757/7-8
 PL-480

ENGINEERING JOURNAL
(INZHENERNYY ZHURNAL)

No 1, 1964

- USSR -

This publication contains translations of 12 articles selected from the Russian-language periodical Inzhenernyy Zhurnal (Engineering Journal), Vol IV, No 1, Moscow, 1964. Complete bibliographic information accompanies each article.

TABLE OF CONTENTS

	<u>Page</u>
Optimum Aerodynamic Maneuver for Change of Orbital Plane During Near Circular Speeds	1
A Theory of Transsonic Gas Flows	12
Oscillations of Cross-Shaped Wings of Finite Span in a Compressible Flow	24
The Effect of Heat Exchange and Turbulent Flow in the Region of Mixing on Characteristics of Breakdown Zones	39
Interaction of Atoms with the Surface of a Solid	50
Calculation of a Very Long Cylindrical Shell by the Method of Superposition	64
A Method for Solution of Basic Spacial Problems of the Theory of Potential and the Theory of Elasticity for Regions Bounded by Two Closed Surfaces	76a
The Stability of a Disk Supporting a Gyroscope	91

Available From JPRS 25622

(Continued)

INZHENERNYY ZHURNAL
Vol IV, No 1, 1964

<u>Table of Contents (Continued)</u>	<u>Page</u>
Exact Solution of a Gas Dynamics Problem About the Motion of a Piston	97
Solution of a Problem Concerning the Oscillations of a Fluid in a Tank by the Method of Perturbing the Shape of the Boundary	103
Propagation of Sound Waves in a Porous Medium Saturated with Gas and Having a Rigid Shell	110
Mechanics of Cosmic Flight with Small Thrust III	126
Available From JPRS 25622	

Measurement Techniques

*A translation of Izmeritel'naya Tekhnika, a publication of the
Academy of Sciences of the USSR*

(Russian Original Dated January, 1964)

1964, No. 1, pp. 1-98

July, 1964

CONTENTS

	PAGE	RUSS. PAGE
Let us Adopt a Progressive Measurement Technology	1	1
GENERAL PROBLEMS OF METROLOGY		
Methodological Basis of the Concept of Measurement. <u>B. Ya. Pakhomov</u>	4	3
The Close and Fundamental Relationship Between the Precision, Sensitivity, Consumption and Speed of Operation of Measuring Devices. <u>P. V. Novitskii</u>	7	5
Technique for Approximating Experimentally-Obtained Characteristics and Computing Maximum Errors of Measuring Instruments by Means of a Digital Computer. <u>A. Kh. Abramov</u> and <u>D. I. Vigdorov</u>	12	8
LINEAR MEASUREMENTS		
Eye-piece Micrometers for Measuring Instruments. <u>E. I. Finkel'shtein</u>	16	11
New Projection Measuring Microscope. <u>E. Lippert</u> , <u>B. Meier</u> and <u>F. Zeldner</u>	20	14
Photoelectric Transducer with a Spring Mechanism. <u>Ya. M. Tseitlin</u> , <u>I. V. L'vovich</u> , and <u>O. I. Yusov</u>	22	15
Profilograph for Grinding-Wheels. <u>L. V. Khudobin</u>	25	17
GOST 2386-62 on Ampoules for Levels. <u>D. I. Novozhilov</u>	27	18
Instrument for Measuring the Referred External Diameter of Oval Cylinders. <u>B. A. Shipilevskii</u> . .	29	19
MECHANICAL MEASUREMENTS		
Experimental Investigation of Deformation Errors in Piston Manometers with a Top Measuring Limit up to 2500 kg-wt/cm ² . <u>V. V. Bakhvalova</u>	31	21
High-Precision Strain-Gauge Test Rack on the Basis of a PMS-48 Potentiometer. <u>E. V. Shtaiger</u> and <u>E. N. Krivtsova</u>	35	23
Ring Electronic Commutators for Switching Two-Directional DC Voltages. <u>V. I. Turchenkov</u> . . .	37	25
Portable Loaded-Piston Manometer for Testing Sphygmomanometers. <u>K. K. Sokolov</u>	40	27
THERMOTECNICAL MEASUREMENTS		
Application of a Kerr Cell for Comparing Luminous Fluxes. <u>D. M. Shcherbina</u>	41	27
Precise Determination of Effective Wavelengths of Spectropyrometers. <u>V. E. Finkel'shtein</u> . . .	43	29
Electrical Oven for Testing Thermocouples. <u>B. N. Zhinkin</u>	45	30
ELECTRICAL MEASUREMENTS		
Method for Converting Electrical Circuit Parameters into Frequency Variations. <u>M. M. Fetisov</u> . .	47	32
Highly-Sensitive Automatic Potentiometer with a High Input Resistance. <u>Yu. P. Volkov</u> and <u>S. G. Rabinovich</u>	52	35
Metrological Characteristics of Precision Voltage Stabilizers and Techniques for their Testing. <u>N. N. Vostroknutov</u> and <u>M. A. Zemel'man</u>	57	38
Equipment for Testing Pointer Instruments by a Comparison Method. <u>V. V. Kudrin</u>	61	41
Testing and Preventive Repairs of Electricity Meters. <u>Yu. M. Rakhinskii</u>	62	42
HIGH AND ULTRAHIGH FREQUENCY MEASUREMENTS		
Effective Spectral Method for Testing Diode Modulation Meters. <u>P. A. Shpan'on</u> and <u>V. A. Belikov</u> . .	63	43

Available From Instrument Society of America

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
Symmetrical Indicator Head for Coaxial Measuring Lines. <u>V. A. Tikhomandritskaya</u>	67	45
Operation of Diode Peak Voltmeters in Measuring Video-Pulse Voltages. <u>M. M. Levin</u> and <u>L. F. Zvonareva</u>	69	47
Supply Sources for Highly-Stable Quartz-Crystal Generators. <u>N. V. Nikitin</u>	73	50
Temperature Coefficients for Q-Factor Standards. <u>N. P. Potapov</u> and <u>G. P. Zheltova</u>	76	52
 LIQUID AND GAS FLOW MEASUREMENTS		
Universal Reference 1st-Grade Metering Vessel. <u>A. N. Pavlovskii</u>	80	55
 REVIEWS AND REPORTS		
Calibrated AC Voltage Sources for Testing Instruments. <u>A. M. Ilyukovich</u> and <u>B. R. Shul'man</u> . . .	81	56
 INFORMATION		
International Symposium on the Theory of Measurements and Measuring Instruments. <u>M. P. Tsapenko</u>	84	58
International Conference of the IEC Subcommittee 13A	86	59
 STATE COMMITTEE OF STANDARDS, MEASURES AND MEASURING INSTRUMENTS OF THE USSR		
Measures and Measuring Instruments Approved by the State Committee as the Result of State Testing and Passed for Use in the USSR	87	60
New Instructions for Testing Measures and Measuring Instruments	94	64
 Available From Instrument Society of America		

Table of Contents

Page
Orig. Trans.

Transactions of the Thirteenth Annual Conference on Nuclear Spectroscopy
(Continued from Vol.27, No.2; to be continued in Vol.27, No.10 & 11 and Vol.28, No.1)

Energy levels of nonspherical odd nuclei (A review) - A.S.Davydov	851	841
Lifetime of the 880 keV 2^+ state of Ti^{46} - A.F.Akkerman, V.L.Kochetkov, & V.N.Chekanov	862	852
Lifetime of the first excited state of Ti^{48} - A.F.Akkerman, V.L.Kochetkov, V.N.Chekanov, G.V.Osloповskikh, V.A.Suvorov & A.K.Shtol'ts	865	855
Levels in Cl^{12} and Ol^6 observed in studying the gamma absorption cross section in the region of the giant resonance - N.A.Burgov, G.V.Danilyan, B.S.Dolbilkina, L.E.Lazareva & F.A.Nikolaev	866	856
Angular distribution of Mössbauer 100.09 keV gamma-rays from W^{182} - A.V.Davydov & V.P.Selyutin	875	864
Concerning the accuracy of superfluid model calculations of the properties of strongly deformed nuclei - M.K.Volkov, A.Pavlikovski, V.Rybarska & V.G.Solov'ev	878	867
Calculation of nuclear radii on the basis of alpha-decay theory taking into account pairing correlations of the superconductivity type - T.Veresh	891	880
Decay scheme for In^{116} - V.S.Pavlov, G.V.Danilyan & I.Ya.Korol'kov	895	884
Characteristics of quasi-stationary levels of the continuum in the Woods-Saxon real potential for nuclei with $A = 5$ to 240 - V.E.Kolesov & V.L.Korotkikh	900	887
Elastic scattering of neutrons from Ol^6 and Cl^{12} - V.E.Kolesov, V.L.Korotkikh & V.G.Malashkina	903	889
On anomalously stable above-threshold states of Cl^{13} and N^{13} - A.N.Boyarkina & I.Rotter	907	893
Determination of the apertures for a $\pi/2$ double focusing β -spectrometer with two successive foci - A.V.Zolotavin	914	899
Excitation functions of nuclear reactions occurring incident to fast proton bombardment of Bi^{209} - B.I.Belyaev, A.V.Kalyamin & A.N.Murin	923	907
Inelastic scattering of deuterons by some chromium, zinc and tin isotopes - O.F.Memets & V.V.Tokarevskii	927	911
Photomultiplier tubes with toroidal dynodes - A.G.Berkovskii, V.G.Gusel'nikov & F.E.Shapovalov	932	916
New miniature photomultipliers - A.G.Berkovskii & T.A.Filimonova	937	920
Concerning simultaneous measurement of the particle energy and emission angle by means of solid state detectors - G.E.Kocharov & Yu.N.Starbunov	940	922
Conditions for a maximum nuclear resonance signal in a flow-through probe - A.I.Zhernovoi	942	924
Shift of the nuclear resonance signal in a flow-through NMR probe - A.I.Zhernovoi & A.B.Rukhin	945	926
Acceleration of polarization in a nuclear magnetic resonance flow-through probe - A.I.Zhernovoi, A.B.Rukhin & O.V.Stakhov	947	928
Amplitude-time discrimination against the gamma background in a scintillation spectrometer for fast neutrons - G.G.Doroshenko, I.V.Filyushkin & V.A.Pedorov	949	930

Available From Columbia Technical Translations

(Continued)

IZVESTIYA AKADEMII NAUK SSSR
SERIYA FIZICHESKAYA
Vol XXVII, No 7, 1963

CONTENTS (Contd)

Measurement and stabilization of inhomogeneous magnetic fields with the aid of electron paramagnetic resonance - S.P.Pivovarov	953	933
Transistor amplifier for use with semiconductor type alpha-particle detectors - I.M.Beskrovnyi	956	936
Design of transistorized current regulators for nuclear spectrometers - I.M.Beskrovnyi, A.S.Butyaga & I.A.Kuragina	961	940

Transactions of the Fourteenth Conference on Spectroscopy

Effect of the nature and position of the substituent on the infrared spectra of benzene sulfochlorides and benzene sulfonates - R.V. Vizgert, A.F.Mal'nev & I.M.Mikhlina	969	947
Spectroscopic investigation of complexes of cobalt chloride with some alkaloids - V.B.Leont'ev & A.S.Sadykov	974	952
Investigation of formation of polymer coatings by the method of infra- red spectroscopy - A.A.Babushkin, V.S.Golikova, L.M.Krylova, Ya. M.Kimel'fel'd & P.I.Zubov	978	956
Use of alkali halide salts as solid "solvents" in infrared spectro- scopy - A.A.Boldin & R.F.Vasil'ev	981	958
Use of light amplifiers for spectroscopic investigation of weakly luminous plasmas - V.F.Bolotin, E.K.Zavoiskii, M.N.Oganov, G.E. Smolkin & A.R.Striganov	986	962

Available From Columbia Technical Transltions

**IZVESTIYA AKADEMII NAUK SSSR,
SERIYA GEOFIZICHESKAYA
No 3, 1964**

English Edition of
Bulletin (Izvestiya), Academy of Sciences, USSR, Geophysics Series No. 3, 1964

CONTENTS

	Page	
	English	Russian
PHYSICS OF THE SOLID EARTH		
B. N. SHECHKOV, Seismic Surface Wave Dispersion and Eurasian Crustal Structure	183	313-321
V. G. GRATSINSKII, Investigation of Elastic Waves in a Model of a Well	188	322-338
TEN TSEI-WEN, Dynamic Characteristics of Seismic Waves in Real Media in the Presence of a Fault	200	339-348
V. I. BARANOV, V. K. KHRISTIANOV, B. V. KARASEV AND G. I. PANOV, Neutron-Borometric Assaying of Outcrops and Open-Pit Mines	206	349-353
A. P. IVANOV, V. N. NIKITINA AND O. A. SKUGAREVSKAYA, Spectral Interpretation of Electromagnetic Field Build-Up Curves	210	354-359
V. N. PONOMAREV AND A. N. BAKHVALOV, Determination of the Attitude of a Thin Bed from Internal Magnetic Field Measurements	214	360-369
Scientific Reports		
L. S. MAKSIMOV AND V. A. TOKMAKOV, The Use of a Modified SPM-16 Seismometer for Recording Displacements in Oscillatory Motion	220	370-373
V. I. BONDAREV, The Influence of Angular Errors in Mounting on the Accuracy of Determination of Particle-Displacement Directions from Azimuthal Seismic Observations	223	374-377
G. A. SOBOLEV, Some Calculations of Fields for Piezoelectric Surveying	226	378-385
A. YA. VLASOV AND A. A. BOGDANOV, Domain Structure in a Single Crystal of Magnetite	231	386-391
A. A. MEIER, The Potential of a Point Source of Current in a Semi-Infinite Inhomogeneous Medium with Conductivity Varying in a Direction Parallel to the Surface	235	392-393
PHYSICS OF THE SEA AND THE ATMOSPHERE		
M. S. MALKEVICH, A. S. MONIN, AND G. V. ROZENBERG (ROSENBERG), The Spatial Structure of a Radiation Field as a Source of Meteorological Information	237	394-407
E. A. NOVIKOV AND R. W. STYUART (STEWART), The Intermittency of Turbulence and the Spectrum of Energy Dissipation Fluctuations	245	408-413
T. I. SISIGINA, Vertical Distribution of Radon in the Boundary Layer of the Atmosphere (0-300 m) in Connection with Changing Meteorological Conditions . .	249	414-421
Scientific Reports		
I. YA. TYUKOV, The Problem of Vertical Distribution of the Density Field in a Baroclinic Sea	255	422-425
E. A. NOVIKOV, The Relative Motion of Liquid Particles in Turbulent Flow	258	426-429
K. I. CHUKANIN, Certain Peculiarities of the Atmospheric Circulation and of the Magnetic Field of the Earth	261	430-435
KH. F. TAMMET, Determination of the Effective Capacitance of the Cylindrical Aspiration Condenser of an Ion Counter	266	436

Available From American Geophysical Union

IZVESTIYA AKADEMIYA NAUK SSSR
SERIYA GEOPHIZICHESKAYA
No 4, 1964

CONTENTS

	English	Russian
PHYSICS OF THE SOLID EARTH		
V. N. ZHARKOV, Gravitational Anomalies and Temperature Deformations of the Earth	267	441-455
E. I. GAL'PERIN (HALPERIN), Detailed Investigation of a Velocity Model of the Upper Part of a Profile Under Conditions of Weak Velocity Differentiation	274	456-474
V. L. BELOTELOV AND N. V. KONDORSKAYA, The Spectra of Body Waves from Kamchatka Earthquakes	285	475-482
S. L. SOLOV'EV AND O. N. SOLOV'EVA, A Comparison of the Amplitude Fields of Body Waves from Kuril-Kamchatka and Mediterranean Sea Earthquakes	290	483-493
V. N. STRAKHOV, The Theory of the Matching Method	297	494-509
P. A. VINOGRADOV, Solar-Diurnal Variations of the Earth's Electric Field	305	510-524
A. S. BOL'SHAKOV, G. M. SOLODOVNIKOV AND YU. P. SKOVORODKIN, The Causes of Reversed Magnetization in the Early Quaternary Lavas of Armenia I .	313	525-531
A. L. POLYACHENKO, The Theory of Nonstationary Diffusion of Thermal Neutrons in a Two-Substance, Infinite Medium with a Cylindrical Dividing Surface	317	532-547
Scientific Reports		
O. M. RASPOPOV AND B. M. YANOVSKIĬ, Vertical Gradient of the Geomagnetic Z Component over the Northwest Wing of the East Asian Anomaly	326	548-551
A. H. KHRAMOV AND O. L. ANDREYEVA, Application of the Determination of a Compensating Field for Finding the Direction of the Primary Magnetization of Rocks	329	552-555
A. YA. VLASOV, A. G. ZVEGINTSEV, AND V. F. PAVLOV, Self-Reversal of the Magnetization of Synthetic Sediments	332	556-561
L. L. VAN'YAN, The Effect of a Low but Nonzero Conductivity of the Base on the Build-Up of a Magnetic Field	337	562-563
V. KH. ZAKHAROV, The Interpretation of Anomalies of Electromagnetic Dipole Profiling Taken Above Solids of Revolution (Spheres, Cylinders)	339	564-569
P. P. PASECHNIK, An Anomaly in the Travel Times of Longitudinal Waves on the Eastern Slope of the Middle Urals	343	570-574
A. V. KOZLOV, The Damping of Body Waves with Distance for Tadzhikistan Earthquakes	346	575-578
PHYSICS OF THE SEA AND THE ATMOSPHERE		
N. A. FUKS (FUCHS), On the Steady-State Distribution of the Charges of Aerosol Particles in a Bipolarly Ionized Atmosphere	350	579-586
N. V. KRASNOGORSKAYA AND A. A. SEREDKIN, On the Space Charge of the Lower Layers of the Atmosphere	355	587-595
K. P. MAKHON'KO, The Washing of Radioactive Dust from the Atmosphere	360	596-603
V. M. MOROZOV, The Spectral Composition of Night Sky Radiation in the Continuum and Photoelectric Observations of Variations of the Intensity of the [O I] 5577 and NaD Emission	364	604-614
Scientific Reports		
A. D. SYTINSKIĬ AND V. P. TRIPOL'NIKOV, Some Results of Investigations of the Natural Vibrations of Ice Fields of the Central Arctic	370	615-621
O. I. MAMAEV, On a Characteristic of Oceanic T,S-Curves 0.1 Mamae	375	622-623

Available From American Geophysical Union

KINETICS AND CATALYSIS

*A translation of KINETIKA I KATALIZ
A publication of the Academy of Sciences of the USSR*

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Vol. 4, No. 3

May-June, 1963

CONTENTS

P A G E
ENG. | RUSS.

The Temperature Dependence of Radiation Chemical Conversion Rates of Hydrocarbons - A. M. Brodskii, K. P. Lavrovskii and V. B. Titov	291	337
Role of the Vessel Surface in the Oxidation of Methane - P. M. Stadnik and V. I. Gomonal	300	348
Oxidation-Reduction of Acceptors in Organic Solvents Exposed to Ionizing Radiations. II. Conversion of Copper Compounds in Acetone Solutions - M. Roder, N. A. Bakh and L. T. Bugaenko	304	353
The Kinetics and Mechanism of Iodination of Aniline by Iodine in Aqueous Solutions - F. M. Vainshtein, E. I. Tomilenko, and E. A. Shilov	307	357
A Study of the Interaction of Oxygen with NiO , Fe_2O_3 , and Cr_2O_3 by Means of the Absorption Spectrum in the Infrared Region - V. N. Filimonov	315	367
The Kinetics of Reactions Involving Solid Phases. III. The Carbiding of Fused Iron Catalysts by Carbon Monoxide - A. Ya. Rozovskii, M. M. Biryukovich, A. A. Ivanov, Yu. B. Kagan, and A. N. Bashkurov	320	373
Chemiluminescence in Slow Chemical Reactions. II. The Effect of Chemical Composition on Chemiluminescence Intensity - R. F. Vasil'ev, A. A. Vichutinskii, O. N. Karpukhin, and V. Ya. Shiyapintokh	329	383
A Study of Homomolecular Exchange of Oxygen on Oxides of Metals of the Fourth Period. II. Catalytic Activity and the Bond Energy of Oxide Oxygen - G. K. Boreskov, A. P. Dzisyak and L. A. Kasatkina	335	388
The Effect of Bond Multiplicity on the Kinetics of Hydrogenation of Polycyclic Hydrocarbons - I. V. Kalechits, A. S. Nakhmanovich, and V. M. Kazantseva	341	395
The Mechanism of Redistribution of Hydrogen in Cyclohexene and Cyclohexadiene-1, 3 on Palladium According to Kinetic Data - V. M. Gryaznov and V. D. Yagodovskii	349	404
The Poisoning of Nickel Catalysts by Carbon Disulfide - G. D. Lyubarskii and L. B. Avdeeva	353	409
The Heterogeneous Catalytic Condensation of Olefins Initiated by Oxygen in the Presence of Hydrogen. II. The Conversion of Ethylene - Ya. T. Eldus, N. I. Eishov, V. R. Erokhina and N. S. Andreev	359	416
An Investigation of the Influence of Various Additions of Lithium and Gallium on the Catalytic Properties of Zinc Oxide for the Homomolecular Exchange of Oxygen Isotopes - V. I. Gorgoraki, L. A. Kasatkina and V. Yu. Levin	365	422

Available From Consultants Bureau

(continued)

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
The Catalytic Activity of Polyphthalocyanins of Copper in the Decomposition of Hydrogen Peroxide - A. A. Berlin, O. A. Golovina, E. S. Dokukina, M. M. Sakharov, and L. G. Cherkashina	373	431
The Reaction Between Hydrogen and Oxygen on Evaporated Palladium Films - Z. Knor, V. Ponets and S. Cherny	378	437
A Study of the Hydrogenolysis of Xylitol. II. Effect of Promoters - N. A. Vasyunina, A. A. Balandin, and Yu. Mamatov	383	443
The Kinetics of Hydrochlorination of Acetylene on Aluminum Oxide - K. V. Topchieva and S. A. Ven'yaminov	389	450
An Investigation of the Acidity of the Hydroxyl Groups on the Surface of Oxide Catalysts by Means of Infrared Spectroscopy - M. S. Borisova, V. A. Dzis'ko, L. A. Ignat'eva, and L. N. Timofeeva	401	461
The Effect of Diffusion on the Distribution of a Zero-Order Reaction Product Along the Length of a Continuous Cylindrical Reactor - I. V. Berezin and S. A. Smolyak	406	467
An Apparatus for the Study of Catalytic Properties During Irradiation in a Nuclear Reactor - I. Maksim, T. Braun and P. Khaduk	414	475
BRIEF COMMUNICATIONS		
The Kinetics of Some Reactions with Metallic Sodium - L. G. Gindin and T. A. Miskinova	418	480
The Calculation of Rate Constants of Double Stage Parallel-Consecutive Second-Order Reactions - V. O. Reikhsfel'd and V. A. Prokhorova	421	483
The Vibrational Relaxation of Oxygen - A. I. Osipov	427	487
An Investigation of the Radiolysis of Several Hydrocarbons Using Gas Chromatography and Electron Paramagnetic Resonance - Z. V. Pshibylovich, V. A. Krongauz, and Kh. S. Bagdasar'yev	430	489
Investigation of a Chromium Oxide Catalyst for the High Polymerization of Ethylene - F. M. Bukanaeva, G. K. Borekov, and V. A. Dzis'ko	432	492

Available From Consultants Bureau

KINETICS AND CATALYSIS

A translation of KINETIKA I KATALIZ
A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Vol. 4, No. 4

July-August, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
The Theory of the Accumulation of Frozen Radicals in Solid Bodies - G. K. Vasil'ev, V. L. Tai'roze	439	497
The Kinetics of Consumption of an Inhibitor Introduced at the Beginning of an Oxidation - E. T. Denisov	448	508
The Use of Radioactive Mercury for Studying Free Radicals in Solution - V. B. Kushner	455	517
Engineering Synthesis of Carbonyl Monomers Based on the Mannich Reaction, III, Studies in the Kinetics of Some Engineering Syntheses - M. I. Farberov and G. S. Mironov	462	526
Polarographic Study of the Kinetics and Mechanism of the Protolytic Nitro-acid-Tautomeric Reactions of Nitrocyclohexane - P. M. Zaitsev, Ya. I. Tur'yan, Z. V. Zaitseva	469	534
The Photochemical Decomposition of Alcohols at Low Temperatures: The Kinetics of the Decomposition of Methyl Alcohol - B. N. Shelimov, N. V. Fok and V. V. Voevodskii	473	539
Possible Quantum-Mechanical Interpretation of the Classification Arranging the Thermal Decompositions of Solids - V. V. Boldyrev, A. A. Medvinskii	481	549
Formation of Radicals in the Radiolysis of Heavy Organic Compounds, II, Radical Yields from Benzene and Diphenyl Derivatives - Yu. N. Molin, I. I. Chkeldze, E. P. Kaplan, N. Ya. Buben, and V. V. Voevodskii	487	557
The Entropy of the Activated Complex in the Hydrogenation of Ethylene on Metals - G. I. Golodets	490	561
The Kinetics of the Synthesis of Ammonia Under Nonequilibrium Conditions - M. I. Temkin, N. M. Morozov, E. N. Shapatina	494	565
Induction Period in Homogeneous Catalytic Reactions in Which Hydrogen Peroxide Participates - K. B. Yatsimirskii, R. P. Morozova	502	574
Reactions of α -Oxides, III, Secondary Reaction Kinetics in the Reaction Between Ethylene Oxide and Acetic Acid - N. N. Lebedev, A. A. Gus'kov	508	581
Dimerization Kinetics of Styrene in Aqueous Sulfuric Acid, II, Kinetic Laws and the Dimerization Mechanism of Styrene - K. S. Kazanskii, G. A. Kogan, S. G. Entelis	514	589
Cracking Kinetics of Cumene on Aluminum Oxide Activated with Boron Fluoride - V. A. Chernov, T. V. Antipina	519	595
Changes in Activity and Composition of Aluminum-Chromium Catalysts during Regeneration - I. Ya. Tyuryaev and L. A. Gusakova	524	601
Dehydrogenation Kinetics of Isopropyl Alcohol in the Liquid Phase, I. - I. R. Davydova, S. L. Kiperman, N. V. Nikolaeva	527	605

Available From Consultants Bureau

(continued)

CONTENTS (continued)

	P A G E	ENG. RUSS.
Hydration of Tertiary Amylenes in the Presence of KU-2 Cationite, and the Accompanying Reactions - N. G. Polyanskii, S. M. Markevich, N. L. Potudina, T. L. Kozlova	534	614
Investigation of the Effect of the Conditions of Preparation of Zinc Oxide with and without Admixtures of Indium and Gallium on its Catalytic Properties in the Reaction of Homomolecular Exchange of Oxygen Isotopes - V. L. Gorgoraki and L. A. Kasatkina.	539	620
Investigations of the Vapor Phase Catalytic Conversion of Acetylene. III. The Kinetics and Mechanism of the Vapor Phase Hydrochlorination of Acetylene on Catalysts Consisting of Mercuric, Cadmium, Zinc or Bismuth Chlorides - A. I. Gel'bshtein, G. G. Shcheglova and A. A. Khomenko.	543	625
Effluent Curve Equation for Equilibrium Sorption with a Continuous Current of Adsorbed Substance through the Adsorbent - V. S. Golubev, A. N. Kirgintsev, and G. M. Panchenkov.	552	635
BRIEF COMMUNICATIONS		
Dependence of the Reaction Rate of Ethyllithium with Alkyl Chlorides on the C-Cl Bond Energy - F. S. D'yachkovskii, A. E. Shilov, and L. I. El'terman.	559	644
Effect of Initial Porosity on Change of Pore Structure of Aluminosilica and Silica Gels on Sintering - A. V. Kiselev and Yu. S. Nikitin	582	648
LETTERS TO THE EDITOR		
The Temperature Limit of the Influence of Radiation of the Rate of Chemical Changes - A. M. Brodskii and K. P. Lavrovskii	566	652
Experimental Proofs of Branching in Chain Reactions of Molecular Fluorine - G. A. Kapralova, E. M. Trofimova, L. Yu. Rusin, A. M. Chalkin, and A. E. Shilov	567	653
Available From Consultants Bureau		

COLLOID JOURNAL

of the USSR

A translation of KOLLOIDNYI ZHURNAL

a publication of the Academy of Sciences of the USSR

© 1963 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 25, Number 2

March-April, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
Nature of Adsorption by Zeolites. Heat of Adsorption of Benzene and n-Hexane Vapors by Zeolite 13X. N. N. Avgul', A. V. Kiselev, A. A. Lopatkin, I. A. Lygina, and M. V. Serdobov	111	129
Derivation of Distribution Functions of a Polydisperse System from Density Changes of the Suspension. N. Ya. Avdeev	117	136
Stabilization of Polystyrene Latex by Nonionic Emulsifiers. I. S. Avetisyan, T. V. Bakaeva, and K. A. Pospelova	123	143
Vapor Supersaturation during Condensation at a Surface. A. G. Amelin	125	146
Infrared Spectroscopic Investigation of the Adsorption of Diethyl Ether on Silica. V. Ya. Davydov, A. V. Kiselev, and V. I. Lygin	130	152
Adhesion of Particles to a Plane Surface. Adhesion in an Aqueous Medium. A. D. Zimon and B. V. Deryagin	135	159
Adsorption on Estersils. A. V. Kiselev, A. Ya. Korolev, and Yu. A. El'tekov ..	140	165
Electrokinetic Potential and pH at the Isoelectric Point of Hydrargillite and of the Products of its Thermal Treatment. Z. P. Koz'mina, M. P. Belova, and V. A. Sannikov	143	169
Helical and Ribbon Structures of Polyethylene. M. B. Konstantinopol'skaya, Z. Ya. Berestneva, and V. A. Kargin	147	174
Investigation of the Movement of Liquids in Porous Media by Ordinary and High-Speed Motion-Picture Photography. N. A. Krotova, L. P. Morozova, N. N. Stefanovich, and L. M. Volina	152	178
Static Fatigue of Rubbers. A. M. Lukomskaya	157	184
Thermodynamics of Polymers. 2. Thermodynamic Stability of Crystalline Polymers. M. M. Martynyuk and V. K. Semenchenko	163	190
Thermochemical and Dilatometric Investigations of Crystallizable Polymer Gels. S. I. Meerson and I. M. Zagraevskaya	169	197
Thermochemical and Dilatometric Investigations of Amorphous Polymer Gels. S. I. Meerson and I. M. Zagraevskaya	172	202
Calculation of the Particle Size Composition of Aerosols from two Mean Radii. D. V. Novozhilova	175	206

(Continued)

Available From Consultants Bureau

CONTENTS (continued)

Determination of the True Relative Swelling of Ion-Exchange Resins. N. G. Polyanskii, P. E. Tulupov, and V. S. Markevich	178	209
Sorption and Chromatographic Processes in Ore Formation. G. L. Pospelov and P. I. Kaushanskaya	183	215
Selective Sorption of Organic Ions in Relation to the Sorption Mechanism and the Structure of Ion Exchange Resins. G. V. Samsonov, A. A. Selezneva, N. P. Kuznetsova, S. B. Tikhomirova, and L. P. Fleet	189	222
The Role of Supersaturation in the Formation of Crystallization Structures in Hardening. E. E. Segalova, E. A. Amelina, and P. A. Rebinder	194	229
Method of Preparation of a Highly Disperse Mist with a High Water Content. E. G. Solyanek, K. A. Zaitseva, and N. V. Orlov	198	234
Swelling and Partial Molar Volumes of Salt Forms of Sulfonated Polybutadiene. G. L. Starobinets and N. A. Polyak	201	238
Anisotropy of the Activation Energy of the Electrical Conductivity of Water in the Adsorbed State. V. M. Fedorov and I. V. Zhilenkov	204	242
Polymer-Plasticizer Interaction. 3. Investigation of Stability Factors and Phase Transitions in Dispersions of Polymers in Plasticizers (Pastes). E. G. Fedoseeva, R. I. Fel'dman, and S. I. Sokolov	208	247
Spreading of Liquid Metals over Solid Metal Surfaces in Relation to the Adsorption Effect of Strength Decrease. 2. Influence of Volume Diffusion on the Spreading of Mercury over a Zinc Surface. E. D. Shchukin, B. D. Sumin, Yu. V. Goryunov, N. V. Pertsov, and A. V. Pertsov	212	253
Structural and Mechanical Properties of Water Paints. B. M. Yabko and N. V. Mikhailov	217	260
On the Sixtieth Birthday of Arkadii Borisovich Taubman. P. A. Rebinder	223	269

Available From Consultants Bureau

TABLE OF CONTENTS

	Page
S. Plevnik:	
Aerospace Medicine	1
M. Minica, D. Babić, N. Köhler-Kubelka and I. Volarić-Mršić:	
Pollinosis	8
P. Zlatar:	
Foreign Bodies in the Eye	14
M. Vidović and V. Luetić:	
The Postphlebitic Syndrome	21
M. Pasini:	
Treatment of Hemorrhoids with Injections	28
V. Fabčić-Sabadi:	
Congenital Diaphragmatic Hernias	33
R. Ivančić:	
The Treatment of Myocardial Infarction	41
M. Spoljar:	
The General Practitioner's Role in Early Cancer Detection	46
B. Vurdelja:	
Pollen Calendar and Pollen Forecast	50
M. Juretić:	
The Problem of Embryopathy Due to Rubella	53

Available From OTS 63-11458/5
PL-480

TABLE OF CONTENTS

	Page
<i>K. Modrić:</i> Principles of the Evaluation of Working Ability	1
<i>Z. Horvat:</i> The Importance of Cells with Motile Cytoplasmic Granules in the Urine of Renal Patients	10
<i>A. Veselinović:</i> An Analysis of the Causes of Blindness in Rijeka	17
<i>Z. Seiwertli:</i> Clinical Importance and Value of Lung Decortication in Chronic Pyogenic and Primary Tuberculous Empyema . . .	20
<i>M. Hrgovčić, B. Richter and Z. Skrabalo:</i> Distomiasis	31
<i>J. Bolčič-Wikerhauser and E. Rajner:</i> Oxygen Therapy as an Intervention by a General Practitioner . .	42
<i>O. Krivec:</i> A Contribution to the Diagnosis of Pyelonephritis	53
<i>V. Dugački:</i> Mythology in Medical Terminology	56

Available From OTS 63-11458/6
PL-480

TABLE OF CONTENTS

	Page
S. Knežević: The Clinical Problems of Diuresis in Patients with Decompensated Liver Cirrhosis	1
V. Mikulić and M. Prosenjak: Hydrocortisone Values in the Determination of Adrenal Function	15
M. Stulhofer, Z. Herceg, S. Slijepčević, D. Marković, S. Blagović, I. Rakuljić and I. Spoljar: Battery Pacemaker for the Heart Constructed in Yugoslavia and its Application in Open Heart Surgery	22
V. Bauk: Rehabilitation of Speech after Laryngectomy	29
D. Novosel and B. Požar: Palindromic Rheumatism	33
B. Jutriša-Koržinek: Eye Injuries and Their Treatment	39
N. Peršić: Psychiatry in the Soviet Union	45
A. Režek: Biographical Gleanings on the Physician and Naturalist Dr. J. B. Gründel, the Writer of the First Monograph on Rogaška Slatina	58
M. Pasini: Artificial Stimulator in the Treatment of Atrio-Ventricular Block	65
I. Vodopija: Typhoid Fever Epidemics — Old and New Problem	71

Available From OTS 63-11458/7
PL-480

CONTENTS

(Numbers in parentheses are original Russian page numbers.
These Russian page numbers are also quoted at the head of each paper.)

Hyperfine Structure of the Atomic Spectrum and Nuclear Moments of the Thorium Isotope ^{232}Th	V. N. Egorov	301 (549)
Determination of the Transition Probability for the Neon Resonance Line at 736 Å	F. A. Korolev, V. I. Odintsov, and E. V. Fursova	304 (555)
The Effect of Radial Changes in Spectral Line Shape on the Integral Characteristics of Nonuniform Light Sources	G. G. Ilin	306 (559)
On the Application of the δ -Function Method to the Calculation of the Optical Absorption Cross Sections in Electronic Bands of High-Temperature Diatomic Molecules	V. N. Soshnikov	307 (562)
Calculation and Interpretation of the Vibrational Spectra of Naphthenes. VI. Vibrational Spectra and Structure of Cyclobutane	E. P. Krainov, N. I. Prokofeva, and L. M. Sverdlov	309 (566)
Vibrational Spectra and Structure of Organic Compounds. IX. Vibrational Spectra and Structure of 1,3-Dienic Silicohydrocarbons	T. V. Yakovleva, M. D. Stadnichuk, and A. A. Petrov	313 (572)
Luminescence of Benzene at Low Temperatures	V. N. Vatulov, N. I. Shoromet, and M. T. Shpak	315 (577)
Use of Triplet-Singlet Transfer for the Study of the Internal Degradation of Electronic Energy in Organic Molecules	V. L. Ermolaev and E. B. Sveshnikova	320 (587)
A Theory of the Interaction of Transitions in the Electronic Shell and Nucleus of an Impurity with Crystal Vibrations	K. K. Rebane	324 (594)
Noncubic Centers in Cubic Crystals and Their Piezospectroscopic Investigation	A. A. Kapiyanskii	329 (602)
Measurements of the Absorption of Thin Deformed Naphthalene Crystals	A. F. Prikhoto, M. S. Soskin, and A. K. Tomaschik	337 (615)
Investigation of the Electric and Magnetic Series in the Luminescence Spectra of Alkali Fluorides Activated by Hexavalent Uranium	A. A. Kapiyanskii, N. A. Moskvina, and P. P. Feofilov	339 (619)
Thermoluminescence of Activated CaF_2 , SrF_2 , and BaF_2 Single Crystals. I. Classification of the Capture Levels and the Recombination Nature of Thermoluminescence	V. A. Arkhangelskaya	343 (628)
New Data on the Spectrum of Colored LiF Crystals	I. S. Gorban and V. B. Timofeev	348 (638)
Study of the Electroluminescence of CdS Single Crystals	N. A. Vlasenko and V. F. Romanenko	350 (642)
The Temperature Dependence of the Average Intensity of Electroluminescence	I. K. Vereshchagin	355 (651)
Diffuse Reflection Spectra of Different Crystalline Modifications of Zinc Sulfide Powders	K. V. Shalimova and N. K. Morozova	359 (659)
On the Radioluminescence of Organic Substances. III. Specific Quenching in Fast-Electron Excitation	S. F. Kilin, M. S. Mikhelashvili, and I. M. Rozman	361 (663)
Some Characteristics of a Ruby Laser with Two Reflecting Prisms	V. M. Podgaetskii, A. N. Chernets, and O. G. Korneeva	366 (674)
Shape of the Light Pulse Emitted by a Flash Lamp	N. A. Tolstol and M. V. Epifanov	367 (677)
Evaluation of the Luminous Flux in a Confocal Elliptic Reflector	V. N. Tsikunov	370 (684)
Study of X-Ray Spectra in the Region of Wavelengths Greater than 15 Å Using a Spectrometer with a Gold-Covered Diffraction Grating	A. P. Lukirskii, T. M. Zimkina, and I. A. Brytov	372 (688)
 DISCUSSIONS		
On the Theory of Quenching of Luminescence	A. S. Selivanenko	376 (695)

Available From Optical Society of America

(Continued)

CONTENTS (Contd)

On A. M. Samson's Paper "Quenching of the Luminescence of Solutions by Foreign Substances" . . .	V. I. Shirokov	377 (696)
Reply to V. I. Shirokov and A. S. Selivanenko	A. M. Samson	378 (697)
SHORT COMMUNICATIONS		
Effect of Intermolecular Interaction and the Interaction of Vibrations on the Infrared Absorption Bands of Nitro Groups	A. V. Iogansen and G. D. Litovchenko	380 (700)
Distribution of Pumping Radiation Density in a Laser Crystal	Yu. A. Anan'ev and E. A. Korolev	381 (702)
Width of Luminescence Spectra and Stokes Losses During Transitions from the Fluorescent and Phosphorescent Levels of Aromatic Compounds	V. L. Ermolaev	383 (704)
The Action of a Light-Wave Field on an Electron in the Self-Consistent Field Method	A. S. Kompaneets	384 (706)
Some Properties of Electroluminescent Film Condensers	F. I. Vergunas, V. V. Kolotkov, E. M. Yashin, and L. I. Smirnova	385 (708)
Dependence of the Profile and Width of Spectral Lines on the Strength and Frequency of Exciting Radiation	P. A. Apanasovich	387 (709)
On the Measurement of High Reflection Coefficients	A. A. Avdeenko, V. M. Akopov, N. L. Kramarenko, Yu. V. Nabolkin, and I. N. Shklyarevskii	388 (712)
On the Delayed Luminescence of Ruby Crystals After Irradiation by Powerful Light Pulses	R. I. Baronov, K. I. Krylov, and S. F. Sharlai	390 (713)
A Simple Method for Calculating Symmetry Coefficients in the Theory of the Vibrations of Polyatomic Molecules	L. A. Gribov	390 (714)

Available From Optical Society of America

SOVIET SOIL SCIENCE

POCHIVOVEDENIYE

No. 4, April 1963

Translation printed: July 1964

CONTENTS

	Page	Russian Page
A NEW STAGE IN THE HISTORY OF AGRICULTURAL CHEMISTRY AND SOIL SCIENCE, by A. V. Sokolov	311	1
WATER REGIME AND PHYSICAL CHARACTERISTICS OF WATERLOGGED FLOOD PLAIN SOILS IN THE SOUTHERN TAIGA ZONE, by F. R. Zaydel'man	313	5
TENTATIVE CLASSIFICATION OF DESERT AND SEMIDESERT SOLONETZES AND SOLODS, by Ye. N. Ivanova	323	20
THE INTERNATIONAL SOIL CONFERENCE IN NEW ZEALAND AND TRIPS THROUGH THE COUNTRY, by I. P. Gerasimov and A. A. Yerozhina	329	29
COMPARISON OF THE COMPOSITION OF SOLUTIONS AND LYSIMETRIC WATER IN A RECENTLY RECLAIMED PODZOLIC SOIL, by Ye. I. Shilova, A. F. Zelenova and L. V. Korovkina	340	45
PROBLEM CONCERNING THE CLASSIFICATION OF NATURAL WATERS AND SOLUTIONS ACCORDING TO THEIR CHEMICAL COMPOSITION, by G. V. Zakhar'ina	351	60
PHOSPHORUS REGIME OF THE SOILS OF THE OKA RIVER FLOOD PLAIN, by L. I. Korableva and G. A. Achkasova	363	76
CHANGE IN THE DIRECTION OF HUMUS FORMATION IN THE FOREST SOILS OF MOLDAVIA DURING PLOWING, by K. K. Zaimov and V. A. Fil'kov	372	87
METHODS		
EXPERIMENTAL STUDY OF THE INTERNAL FLOW OF WATER IN SOILS OF THE NORTHERN PART OF THE WESTERN SAYAN (Yermakov Station), by M. P. Smirnov	376	93
NEW CALCAREOUS FORMATIONS IN THE SOIL-FORMING PARENT MATERIAL IN THE SIVASH REGION, by V. A. Suprychev	383	101
REVIEWS		
BOOK BY S. S. SOBOLEV 'DEVELOPMENT AND CONTROL OF EROSION PROCESSES IN EUROPEAN USSR', by G. P. Surmach	387	105
A. I. PEREL'MAN. SALT MIGRATION PROCESSES ON THE PLAINS OF EASTERN TURKMEN SSR AND WESTERN UZBEKISTAN IN THE NEO- GENE SYSTEM, by V. V. Dobrovol'skiy	394	112
ALEKSANDR NIKOLAYEVICH ROZANOV 1892-1963	395	113
BIBLIOGRAPHY	397	115

Available From Scripta Technica

SOVIET SOIL SCIENCE

POCHIVOVEDENIYE

No. 5, May 1963

Translation printed: July 1964

CONTENTS

	Page	Russian Page
STRENGTHENING THE TIES OF SCIENCE AND PRODUCTION, by Ya. V. Peyve.	409	1
METHODS OF DETERMINING THE MINERAL FORMS OF PHOSPHORUS IN SOIL, by D. L. Askinazi, K. Ye. Ginzburg and L. S. Lebedeva	413	6
AVERAGE CHEMICAL COMPOSITION OF THE PRINCIPAL SOIL GROUPS OF THE EUROPEAN USSR BY TOTAL ANALYSES, by S. A. Kudrin.	424	21
ARCTIC TUNDRA SOILS OF THE YUGOR PENINSULA, by I. V. Ignatenko.	429	26
INFLUENCE OF CULTIVATION ON THE CHANGE IN THE CHEMICAL COMPOSITION AND AGROCHEMICAL PROPERTIES OF BOG SOILS IN THE MURMANSKAYA OBLAST', by V. N. Pereverzev.	441	41
CHARACTERISTICS OF SOD PODZOLIC SOILS FORMED ON BINARY ALLUVIAL DEPOSITS, by L. S. Dolgova	451	53
COMPARATIVE CHARACTERISTICS OF SOD PODZOLIC CLAY LOAM SOILS OF MIXED CONIFEROUS-DECIDUOUS AND BROADLEAF FORESTS OF THE CENTRAL VOLGA, by V. N. Smirnov.	459	64
CHARACTERISTICS OF THE SOILS IN THE CITIES, by L. T. Zemlyanitskiy ..	468	75
METHODS		
RESPONSE OF RICE TO SOIL SALINITY, by N. S. Kistanov	476	85
A RAPID METHOD OF DIGESTING SOILS AND PLANTS, by K. Ye. Ginzburg, G. M. Shcheglova and Ye. V. Vil'fius	481	89
DECOMPOSITION OF SOILS WITH SULFURIC AND PERCHLORIC ACIDS TO DETERMINE NITROGEN AND PHOSPHORUS, by A. M. Meshcheryakov.	488	96
IODOMETRIC DETERMINATION OF HYDROGEN SULFIDE IN SOILS, by G. M. Kader	493	101
CHRONICLE		
ACTIVITY OF THE ALL-UNION SOCIETY OF SOIL SCIENTISTS DURING 1962, by N. A. Razorenova.	496	105
REVIEWS		
P. BURINGH. 1960 THE DEVELOPMENT OF METHODS OF AERIAL PHOTO-INTERPRETATION IN THE SOIL SECTION OF THE INTERNATIONAL TRAINING CENTER FOR AERIAL SURVEY. SERIES B, 1 (2), by I. Karmanov.	503	113
BIBLIOGRAPHY.	505	115

Available From Scripta Technica

SOVIET SOIL SCIENCE

POCHVOVEDENIYE

No. 6, June 1963

Translation printed: July 1964

CONTENTS

	Page	Russian Page
CONFERENCE ON METHODS USED IN PERMANENT INVESTIGATIONS OF SOIL PROCESSES, by S. N. Ryzhov.	517	1
SOIL REGIMES, PURPOSES AND GENERAL METHODS OF THEIR STUDY, by A. A. Rode.	519	4
BRIEF PROGRAM OF PERMANENT SOIL AND HYDROLOGICAL INVESTIGA- TIONS IN FOREST BIOGEOCOENOSES, by S. V. Zonn.	527	15
METHODS OF STUDYING THE THERMAL REGIME OF SOILS, by V. N. Dimo. . .	534	26
METHODS OF INVESTIGATING THE CHEMICAL COMPOSITION OF THE LIQUID SOIL PHASE (SOIL SOLUTION), by I. S. Kaurichev, N. A. Komarova, I. N. Skrynnikova and Ye. I. Shilova.	541	35
METHODS OF STUDYING THE AIR REGIME OF SOILS DURING PERMANENT INVESTIGATIONS, by V. N. Mina, B. N. Makarov, V. B. Matskevich and V. I. Shtatnov.	551	48
MIGRATION OF SOME CHEMICAL ELEMENTS WITH RIVER WATERS IN MOUNTAIN-TAIGA REGIONS, by V. O. Targul'yan.	558	58
MOVEMENT OF SALT SOLUTIONS IN SOILS AND SOIL MATERIALS, by P. I. Krupkin.	567	70
OLONETZIZATION PROCESSES IN THE SOILS OF THE VOLGA-AKHTUBA FLOOD PLAIN, by V. P. Bobkov.	575	80
METHODS		
ROLE OF HUMUS, EXCHANGEABLE CALCIUM AND CLAY IN THE FORMA- TION OF THE STRUCTURE OF HUMUS-ELUVIAL HORIZONS IN FOREST SOILS, by B. D. Zaytsev.	583	90
THE EFFECT OF POLYMERS IN THE PHYSICAL PROPERTIES OF SOILS AND ON THE YIELD OF AGRICULTURAL CROPS, by V. A. Ryaboklyach.	589	97
CHRONICLES		
CONFERENCE OF SIBERIAN AND FAR EASTERN SOIL SCIENTISTS, by R. V. Kovalev.	599	107
CONFERENCE ON METHODS USED IN PERMANENT INVESTIGATIONS OF SOIL PROCESSES, by M. M. Abramova and N. M. Fedorova.	603	111
REVIEWS		
"AGRICULTURAL-HYDROLOGICAL PROPERTIES OF SOILS IN THE CENTRAL VOLGA REGION" (HANDBOOK), by N. D. Pustovoytov.	607	115
BIBLIOGRAPHY.	609	117

Available From Scripta Technica

TABLE OF CONTENTS

	Page
VLATKO BRČIĆ, Ph. D. C. E. PHOTOELASTIC INVESTIGATION OF THE BAJINA BASTA DAM MODEL	5
DIMITRIJE MARJANOVIC, C. E. POSSIBILITY OF PROVIDING THE ISLAND OF BRAC WITH WATER . . .	21
GEZA BATA, Ph. D. C. E. and NASTASIJA ASKOVIC, C. E. HEIGHTENING OF FLOOD WAVES ON THE SAVA RIVER DUE TO PRO- TECTION OF FLOOD PLAINS	43
MIHAILO VOJINOVIC, Ph. D. C. E. LOW WATERS AT RIVER MOUTHS	61
MIHAILO VOJINOVIC, Ph. D. C. E. CHANGES IN WATER COURSES CAUSED BY WATER INTAKES WITHOUT BARRAGES	67
JELISAVETA MUSKATIROVIC, C. E. THE EFFECT OF MORAVA VALLEY FLOOD PROTECTION WORKS ON THE DISCHARGE AND WATER LEVELS	75
NENAD ĐORĐEVIC, Meteorologist EVAPOTRANSPIRATION FROM A FIELD WITH CULTIVATED CROPS AND FROM SLUGGISH WATER SURFACES IN THE CATCHMENT AREA OF THE RIVER SITNICA	83
A REVIEW OF THE WORKS OF THE JAROSLAV CERNI INSTITUTE FOR DEVELOPMENT OF WATER RESOURCES FOR THE YEAR 1962 . . .	93

Available From OTS 63-11451/4
PL-480

CONTENTS

	Page	Russian Reference
Parity Nonconservation and Macroscopic Rotation.		
..... I. Yu. Kobzarev and B. Pontecorvo	611	81, 3
Electron and Positron Storage Rings		
..... A. I. Alikhanyan, S. A. Khelifets, and S. K. Esin	614	81, 7
Flow Birefringence and the Structure of Macromolecules.		
..... V. N. Tsvetkov	639	81, 51
Interference Effects in Quantum Transitions		
..... M. I. Podgoretskiĭ and O. A. Khrustalev	682	81, 217
Neutral Hydrogen Near the Earth and in Interplanetary Space		
..... V. G. Kurt	701	81, 249
Monopole Transitions of Atomic Nuclei.		
..... L. A. Borisoglebskiĭ	715	81, 271

Personalia

Boris Yakovlevich Sveshnikov		
..... A. V. Aristov, V. L. Ermolaev, V. L. Levshin, G. A. Mokeeva, A. S. Cherkasov, and V. I. Shirokov	755	81, 201
Boris Ivanovich Stepanov		
..... M. A. El'yashevich and F. I. Fedorov	764	81, 401

Available From American Institute of Physics
Soviet Physics - Uspekhi
Vol VI, No 5

CONTENTS

	Page	Russian Reference
Strong Interactions at Very High Energy. (T)		
. E. L. Feinberg and D. S. Chernavskii	1	82, 3
A Hall Effect Problem (The Galvanomagnetic Paradox) (E)		
. V. V. Serkov	49	82, 161
Experiments on Fresnel Diffraction by a Narrow Transparent Ring in an Opaque Screen. (E)		
. Ya. E. Amstislavskii	51	82, 163
Demonstration Experiment With a Zone Plate. (E)		
. V. A. Kirillov, V. I. Tverdokhlebov, and V. I. Khomenko	54	82, 166
Neutral K Mesons. (T)		
. I. I. Gurevich and B. A. Nikol'skii	55	82, 177
Application of the Statistical Method to Calculation of the Optical Properties of Lasers. (E)		
. B. I. Stepanov and V. P. Gribkovskii	68	82, 201
Magnetohydrodynamic Phenomena in Comets and Their Connection with Geosynchronous Currents. (E/T)		
. L. S. Marochnik	80	82, 221
The Circular Polarization of γ -Ray Quanta Emitted by Atomic Nuclei Subsequent to β Decay. (T/E)		
. I. V. Éstulin and A. A. Petushkov	101	82, 253
The Present State and Some New Results of the Molecular-Beam Method. (E)		
. V. B. Leonas	121	82, 287

Available From American Institute of Physics
 Soviet Physics - Uspekhi
 Vol VII, No 1

VESTNIK OF USSR ACADEMY OF SCIENCES

No 4, April 1964

Following is the complete translation of the Russian-language publication Vestnik Akademii nauk SSSR (USSR Academy of Sciences Journal), No 4, Moscow, April 1964, pages 1-184. The names of the speakers on the various scientific activities accompany each individual article.

TABLE OF CONTENTS

	<u>Page</u>
On the Seventieth Birthday of Comrade N. S. Khrushchev Greetings from the Presidium of the USSR Academy of Sciences	1
The Leninist Stage in the Development of Marxism and the Problems of Studying It	3
The General Meeting of the USSR Academy of Sciences (3-5 February 1964)	
The State and Development of Science and the Major Scientific Achievements in the Nation in 1963	17
The Division of Mathematics	17
The Division of General and Applied Physics	22
The Division of Nuclear Physics	27
The Division of Physical-Technical Problems of Power Production	34
The Division of Earth Sciences	40
The Division of Mechanics and Control Processes	47
The Division of Physiology	54
The Division of General Biology	59
The Division of History	65
The Division of Philosophy and Law	70
The Division of Economics	76
The Division of Literature and Language	83
The Debates on the Reports	91

Available From JPRS 25717

(Continued)

<u>TABLE OF CONTENTS</u> (cont.)	<u>Page</u>
Scientific Problems in the Development of Chemistry	
The December (1963) Plenum of the Central Committee	
of the CPSU and the Tasks of Soviet Sciences	
The Report of the Vice-President of the USSR Academy	
of Sciences, the Academician N. N. Semenov	105
The Division of General and Technical Chemistry	124
The Division of Physical Chemistry and Technology	
for Inorganic Materials	134
The Division of Biochemistry, Biophysics and the	
Chemistry of Biologically Active Compounds	138
Debates on the Reports	144
 On the Scientific Problems in Developing Chemistry	
Decree of the General Meeting of the USSR Academy of	
Sciences	158
 Methodological Questions in Historical Science	163
 Strengthening Scientific Contacts Between Soviet and	
Yugoslav Scientists	189
 Sessions, Conferences and Meetings	192
 Current Events and Information	223
 Criticism and Bibliography	229
 New Books	236
 Photo Appendix	243

Available From JPRS 25717

HERALD OF COMMUNICATIONS

No 5, 1964

Following is a translation of the Russian-language periodical Vestnik svyazi (Herald of Communications), Vol XXIV, No 5, published by the Ministry of Communications USSR and the Central Committee of the Communications, Motor Transport and Highway Workers Trade Union, May 1964, Moscow. Note: Original source pages are given in the left-hand margin.

TABLE OF CONTENTS

	<u>Page</u>
Latest Communication Equipment	1
On the Training of Cadres of Radio Telegraphers/flyleaf/.....	6
Editorial. Radio-Communication, Radio-Broadcasting and Television Equipment Must Be Developed and Improved	9

COMMUNICATION ENGINEERING

Equipment of the Type URLV for the Multiplexing of Radio-Relay Lines With Broadcasting Channels, by S. Ye. Glikman	15
Braced Masts on Radio-Communication and Broadcasting Links, by A. A. Voyevodin	26
The Raising of Synchronization Quality in Long Distance Television, by S. I. Katayev and L. I. Konstantinusku	41
Electric Properties of City Three-Program Rediffusion Networks, by I. T. Rivkis	45

Available From JPRS 25555

(Continued)

CONTENTS (Contd)

page

Individual Equipment of the 24-Channel Multiplexing Equipment of the Type BK-24, by G. Ye. Yartsev	55
---	----

DECISIONS OF FEBRUARY PLENUM OF THE PARTY
CENTRAL COMMITTEE ARE BEING PUT INTO PRACTICE!

For Rural Toilers — A Model Communication Service	71
---	----

ORGANIZATION AND OPERATION OF COMMUNICATION
FACILITIES

Radio and Telephone in the Villages of Uzbekistan, by M. A. Linchevskiy	82
Development of Radiofication is a Most Important Political Task, by P. A. Gershel'	88
We Will Not Rest On The Achievements, by A. A. Koltonova	94
Communications Workers — To Industrial Chemistry, by M. I. Mozgunov	97
Conference-by-Correspondence of the Workers of Long Distance Telephone Service	103

INFORMATION

The Achievements of Chemistry Are To Be Utilized at the Industrial Enterprises of the Ministry of Communications	108
--	-----

AT COMMUNIST-LABOR ENTERPRISES

A Radio Center of High Technical Efficiency, by S. G. Volkov, A. V. Kiyashko and L. Ye. Yakovlev	112
---	-----

* * *

Voltage Converter PN	123
----------------------------	-----

Available From JPRS 25555

(Continued)

VESTNIK SVYAZI
Vol XXIV, No 5, 1964

CONTENTS (Contd)

	<u>page</u>
For An Uninterrupted Motor-Transport Service To Communications Enterprises	125
Automatic Telephone Service in Rayons	126
In the City of Power-Supply and Chemical Workers	126
The Fiftieth Graduation of Communications Workers	127
Foreign Novelties	128
Books	130

Available From JPRS 25555

JOURNAL OF ANALYTICAL CHEMISTRY

OF THE USSR

A translation of (ZHURNAL ANALITICHESKOI KHIMII)

A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 18, Number 9

September, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
Methods for Obtaining Analytical Concentrates of Uranium — A. K. Babko and V. N. Danilova	895	1036
The Effect of Alkali and Alkaline Earth Metals on the Background in the 3500-4200 Å Spectral Region — N. I. Tarasevich and A. D. Khlystova	900	1042
An Extraction Photometric Method for Determining Total Heavy Metals by Means of Sodium Diethyldithiocarbamate — A. B. Blank, N. T. Sizonenko, and A. M. Bulgakova	904	1046
An Express Method for Determining Potassium in Soil — L. E. Smirnov, V. N. Natal'ina, and R. I. Kuznetsov	908	1051
Determination of Gold in Coatings on Tungsten by Means of Variamine Blue — I. S. Mustafin, N. S. Frumina, and L. A. Agranovskaya	911	1054
Thermionic Emission of Lead on Tungsten and Rhenium — M. S. Chupakhin	915	1059
The Effect of the Composition of Mixtures of Esters with Ketones and Alcohols on the Separation of Some Rare Earths by Paper Chromatography — M. E. Vdovenko	919	1063
A Spectrophotometric Study of the Interaction of Trivalent Aluminum and Hexavalent Molybdenum Ions with Xylenol Orange. Determination of Aluminum and Molybdenum in Uranium — B. Budeshinsky	925	1071
Determination of Manganese Dioxide in the Presence of Some Reducing Agents — N. I. Stognii	928	1075
The Use of C ₇ -C ₉ Fatty Acids for Separating Iron and Copper from Nickel — S. E. Kreimer, N. V. Tuzhilina, and A. S. Lomekhov	932	1080
The Photometric Determination of Palladium — T. F. Frantsevich-Zabludovskaya, L. P. Kalimanova, and G. I. Sharafan	935	1083
A Chemico-Spectrographic Method for Determining Impurities in Metallic Niobium — N. N. Kuznetsova and L. S. Krauz	941	1090
Extraction Separation of Selenium and Tellurium Followed by Their Photometric Determination — A. I. Buxev, N. L. Babenko, and Hoang Min T'iau	945	1094
Elemental Analysis of Fluoroorganic Compounds. Simultaneous Microdetermination of Fluorine and Nitrogen — N. É. Gel'man and N. I. Larina	950	1100

Available From Consultants Bureau

(continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
A Photometric Method for Determining Peroxides in Tetrahydrofurane - A. P. Zozulya and É. V. Novikova	954	1105
Polarographic Determination of Organic Peroxides - M. F. Romantsev and É. S. Levin.	957	1109
Polarographic Determination of the Purity of Trimethylhydroquinone - G. P. Tikhomirova and S. L. Belen'kaya	963	1116
Amperometric Titration of Vinyl Monomers - Ya. N. Tur'yan and L. N. Kozina.	966	1120
The Use of Mercuric Sulfate in the Quantitative Analysis of Olefines and Tertiary Alcohols. Communication 2. Determination of Tertiary Amylenes - M. M. Buzlanova, N. A. Kozhikhova, and N. G. Polyanski	971	1125
Quantitative Determination of Impurities in Diphenylolpropane by Paper Chromatography - A. S. Salova and L. A. Vinogradova.	974	1128
BRIEF COMMUNICATIONS		
Differential Spectrophotometric Determination of Iron in Products of the Titanium and Magnesium Industry - V. I. Tikhonov and N. D. Rychkova.	977	1131
Microquantitative Determination of Iodine Ions and Elemental Iodine in Iodine-Iodide Solutions - N. Gancev and Tsc. Tordova	980	1134
CRITICISM AND BIBLIOGRAPHY		
Book Review - A. P. Kreshkov, V. A. Dork, E. A. Bondarevskaya, L. V. Myshlyayeva, S. V. Syavtshilo, and V. T. Shemyatenkova.	982	1136
CHRONICLE		
Conference on Methods of Concentrating Elements in Analytical Chemistry - Yu. M. Dedkov. .	984	1138
The Moscow Seminar on Analytical Chemistry - N. G. Nikitina and S. S. Rodin.	987	1141
Izdatel'stvo Akademii Nauk SSSR	989	Back cover

Available From Consultants Bureau

JOURNAL OF ANALYTICAL CHEMISTRY

OF THE USSR

A translation of (ZHURNAL ANALITICHESKOI KHIMII)

A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 18, Number 10

October, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
Amperometric Titration of Alkylchlorosilanes in Methanol—Benzene and Acetic Acid Media—A. P. Kreshkov, V. A. Bork, and M. L. Aparsheva	993	1149
Some Problems Relating to the use of Zone Refining for Obtaining Analytical Concentrates —Sh. L. Peizulaev and É. E. Konovalov	999	1155
Oxidized Platinum Electrodes in Electrometric Analysis—V. E. Petrakovich	1004	1161
Concentration of Materials in Polarographic Analysis. Communication 1 —Kh. Z. Brainina	1010	1169
Determination of Ion Exchange Constants from the Results of Chromatographic Experiments. Communication 1. Determination of the Exchange Constants of Cesium on KU-2 Sulfonate Cation Exchange Resin—G. M. Kolosova and M. M. Senyavin	1017	1178
Spectra Excitation in a Universal Method for the Quantitative Determination of Elements —N. B. Kubasova and G. L. Kibisov	1022	1184
The Use of Multichannel Analyzers for Activation Analysis—S. S. Kurochkin	1028	1192
A Study of the Extraction of Calcium by Means of Azo-Azohydroxy BN in the Presence of Polar Solvents—F. P. Gorbenko and V. V. Sachko	1033	1198
A Simple Method for Separating Radioactive Strontium and Barium—E. Bakacs-Polgar and L. Kurcz-Csiky	1040	1206
A Potentiometric Method for Determining Divalent Mercury by Means of a Mercury Electrode—A. I. Mogilyanskii, O. N. Temkin, R. M. Flid, and R. V. Bunina	1045	1211
Pyrocatechol Violet as a Reagent for Germanium—V. A. Nazarenko and L. L. Binarova	1050	1217
Electrolytic Deposition of Nickel from Solutions Containing Thorium Salts —T. V. Tsyvenkova, P. N. Kovalenko, and Z. L. Ivanova	1054	1222
Determination of Ultramicroamounts of Cobalt in Phosphorus by a Kinetic Method —V. M. Peshkova, I. F. Dolmanova, and N. M. Semenova	1059	1228
The Use of 1-Mercaptopropionic Acid Derivatives in Analytical Chemistry. Communication 2. Photometric Determination of Palladium		

Available from Consultants Bureau

(continued)

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
with 1-Mercaptopropionic-p-Phenetidine — A. I. Busev and A. Naku	1064	1233
A Titrimetric Semimicromethod for Determining Carbonate Carbon in Solid Mineral Fuels — L. V. Grinberg and A. A. Salamin	1070	1239
Determination of Small Amounts of Phenols by a Chemiluminescent Method — A. A. Ponomarenko and L. M. Amelina	1075	1244
Polarographic Determination of 1,3,5-Triphenylpyrazoline- Δ^4 in Plastic Scintillators — G. G. Belous and V. D. Bezuglyi	1080	1250
The Use of Ion Exchange Resins for Separating Chlorophenoxyacetic Acids, Their Salts, and Phenol — L. K. Tsitovich and V. I. Cherkashin	1084	1255
Determination of Primary, Secondary, and Tertiary Amino Groups in Polynuclear Polyamines — Yu. A. Strepikheev, A. A. Zalikin, and A. L. Chirmishkyan	1091	1262
Quantitative Iodination of Some Monoamylphenols — O. N. Karpov	1094	1266
BRIEF COMMUNICATIONS		
The Interaction of the Electrode Material with the Solution in the Presence of Oxidizing Agents — O. A. Songina and L. S. Studenskaya	1097	1269
Determination of Sodium in Metallic Tungsten by a Radioactivation Method — V. L. Spitsyn, M. P. Glazunov, P. N. Kodochigov, and V. P. Ionov	1100	1272
Gravimetric Determination of Gallium as Phosphate — I. V. Tananaev and N. N. Chudinova	1102	1274
Detection of Tin During Systematic Analysis of the Hydrogen Sulfide Group of Cations — A. Aleksandrov and P. Vasileva-Aleksandrova	1104	1275
CRITICISM AND BIBLIOGRAPHY		
Precipitation Chromatography — K. M. Ol'shanova, V. D. Kopylova, and N. M. Morozova . .	1106	1277
CHRONICLE		
Sixth Conference on the Analysis of the Platinum Metals — N. V. Fedorenko	1108	1279
Moscow Seminar on Analytical Chemistry — Yu. M. Dedkov	1109	1280

Available From Consultants Bureau

JOURNAL OF ANALYTICAL CHEMISTRY

OF THE USSR

A translation of (ZHURNAL ANALITICHESKOI KHIMII)

A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 18, Number 11

November, 1963

CONTENTS

	P A G E	
	ENG. RUSS.	
Errors in Spectrophotometric Measurements — N. P. Komar' and V. P. Samoilov	1113	1284
Determination of Small Amounts of Paramagnetic and Diamagnetic Ions by Nuclear Magnetic Relaxation — A. A. Popel' and E. D. Grazhdannikov	1120	1291
2,4-Dithiobiuret and 1-Phenyl-2,4-Dithiobiuret — New Reagents for Amperometric Titration. Communication 1. Acid and Polarographic Properties of Dithiobiurets — Yu. I. Usatenko and A. S. Sukhoruchkina	1123	1295
Catalymetric Titration — K. B. Yatsimirskii and T. I. Fedorova	1128	1300
High Frequency Titration. Communication 9. Titration of Acids in an Acetic Acid Medium — V. A. Zarinskii and I. A. Gur'ev	1133	1306
Analysis of Impurity Concentrates in a Discharge Tube with a Hollow Cathode — G. A. Pevtsov and V. Z. Krasil'shchik	1140	1314
Determination of High Water Concentrations in Organic Solvents on the Basis of Near Infrared Absorption Spectra — A. V. Karyakin and A. V. Petrov	1143	1317
Photometric Determination of Copper with α -Furildioxime — N. V. Benediktova — Lodochnikova	1147	1322
The Extraction and Photometric Determination of Gallium — V. K. Kuznetsova	1151	1326
Gravimetric Determination of Gallium with N-benzoylphenylhydroxylamine — I. P. Alimarin and Sherif Abdel Hamid	1156	1332
Separation of Indium from Di-, Tri-, and Tetravalent Metals by Extraction with Alkyl Phosphoric Acids — I. S. Levin and T. G. Azarenko	1159	1335
The Photometric Determination of the Rare Earth Elements in Ores by Means of Arsenazo III — V. G. Goryushina, S. B. Savvin, and E. V. Romanova	1164	1340
A Chemico-Spectrographic Method for Determination of Manganese, Molybdenum, Tungsten, and Tantalum as Impurities in High Purity Elemental Boron — N. I. Tarasevich and A. A. Zheleznova	1169	1345

Available From Consultants Bureau

(continued)

CONTENTS (continued)

	P A G E ENG. RUSS.
Determination of Manganese in Silicon by a Radioactivation Method — E. M. Lobanov, V. I. Zvyagin, A. A. Kist, B. P. Zverev, A. I. Sviridova, and G. A. Moskovtseva	1173 1349
Determination of Iron in Water, Acids, and Salts by a Kinetic Method Using Stilbexone — S. U. Kreingol'd, E. A. Bozhevol'nov, R. P. Lastovskii, and V. V. Sidorenko	1179 1356
Concentration of Materials in Polarographic Analysis. Communication 2. Separation of Iron — Kh. Z. Brainina and E. M. Roizenblat	1184 1362
The Use of Neutron Absorptiometry for Determining the Boron Content of Boroorganic Compounds — N. G. Malysheva, L. P. Starchik, I. S. Panidi, and Ya. M. Paushkin	1188 1367
1-Phenylthiogemicarbazide as a Reagent for Selenium — A. I. Busev and Hoang Min Chau	1191 1370
A Conductometric Method for Determining Silicon in Silicoorganic Compounds — A. P. Kreshkov, L. V. Myshlyayeva, O. B. Khachatryan, and V. V. Krasnoshchekov	1196 1375
Coulometric Determination of Small Amounts of Furan in Tetrahydrofuran — A. P. Zozulya and E. V. Novikova	1200 1380
Spectrophotometric Determination of Isomeric Phthalic Acids — I. V. Butina, V. G. Plyusnin, and N. A. Shevchenko	1203 1384
BRIEF COMMUNICATIONS	
An Iodochlorometric Determination of Styrene and Indene — O. N. Karpov and R. M. Bystrova	1208 1390
The Interaction of Stilbene-2,2'-Disulfonic Acid-4,4'-Bis-[< 1-Azo > -4- Hydroxybenzene] with Certain Divalent Metal Ions — A. I. Cherkasov and Yu. V. Pushinov	1210 1392
The Effect of Beryllium on Calcium Radiation in an Air-Acetylene Flame — I. A. Gavrilova	1212 1394
A Study of the Extraction of Microamounts of Calcium in the Presence of Alkylamines — E. P. Gorbenko, I. A. Shevchuk, Yu. K. Tselinskii, and V. V. Sachko	1215 1397
Increasing the Sensitivity of Nitrogen Detection in Organic Compounds by Lassaigne's Method — M. D. Shvangiradze, K. A. Tskhadadze, M. I. Tarenko, and V. P. Gogvadze	1217 1399
Determination of Methyl Ethyl Ketone in Acetone — A. S. Maslennikov and G. N. Poryvaeva	1219 1401
LETTER TO THE EDITOR	
Apropos an Article by K. Peters and S. Pajakoff	1222 1404
CRITICISM AND BIBLIOGRAPHY	
B. S. Khristoforov and E. D. Glotko, "Material (Phase) Analysis of the Products of the Lead Industry" — A. G. Petrenko	1223 1405
The Moscow Seminar on Analytical Chemistry — Yu. M. Dedkov	1225 1407
OBITUARY	
Aleksandr Ivanovich Kokorin	1226 1408

Available From Consultants Bureau

CONTENTS

	Page	Russian Reference
Investigation of Brownian Rotation of Nonaspherical Liquid Molecules by Nuclear Paramagnetic Resonance. (E) A. Sh. Agishev	1	46, 3
Polarization of Gamma Rays from $\text{Si}^{30}(\text{p}, \gamma) \text{P}^{31}$. (E) P. M. Tutakin	7	46, 10
Concerning the Fermi Surface of Aluminum. (T/E) V. F. Naberezhnykh and V. P. Tolstoluzhskii	13	46, 18
Formation of High Energy Gamma Quanta in Extensive Air Showers with Energies 10^{14} — 10^{15} eV in the Upper Third of the Atmosphere. (E) R. A. Antonov, Yu. A. Smorodin, and Z. I. Tulinova	20	46, 28
Formation of a Virtual Cathode in an Electron Beam Passing through a Plasma. (E) M. V. Nezhlin	26	46, 36
Investigation of the Interaction of 3×10^{11} — 6×10^{12} eV Nucleons at Altitudes of 6—12 km. (E) B. V. Tolkahev	31	46, 43
Triple Scattering of 660-MeV Protons. IV. Angular Dependence of the Parameter A. (E) Yu. P. Kumeikin, M. G. Meshcheryakov, S. B. Nurusev, and G. D. Stoletov	36	46, 50
Estimate of the Relative Probability for the $K_2^0 \rightarrow 3\pi^0$ Decay. (E/T) M. Kh. Anikina, M. S. Zhuravleva, D. M. Kotlyarevskii, Z. Sh. Mandzhavidze, A. N. Mestvirishvili, D. V. Naagu, É. O. Okonov, N. I. Petrov, V. A. Rusakov, G. G. Takhtamyshev, L. V. Chkhaidze, and Wu Tsun-Fan	42	46, 59
Hall Coefficient and Electrical Resistance of Ferromagnets. (E) I. K. Kikoin and T. N. Igoshva	48	46, 67
Mode Excitation and an Explanation of the Divergence of the Radiation from a Ruby Laser (E) A. M. Leontovich and A. P. Veduta	51	46, 71
Cross Sections for Radiative Capture of Neutrons with Energies up to 50 keV by La^{139} , Pr^{141} , Ta^{181} , and Au^{197} . (E) V. A. Konks, Yu. P. Popov, and F. L. Shapiro	59	46, 80
Paramagnetic Resonance of Free Gold and Silver Atoms Trapped in Various Media at Liquid Nitrogen Temperatures. (E) R. A. Zhitnikov and N. V. Kolesnikov	65	46, 89
Investigation of Inelastic Collisions between 2.8 BeV/c π^- -Mesons and Protons. (E) Yu. V. Trebukhovskii, I. A. Eroseev, and G. D. Tikhomirov	72	46, 99
The Temperature Dependence of the Overhauser Effect in Dilute Aqueous Manganese Ion Solutions in Low Magnetic Fields. (E) V. E. Kul'beda	77	46, 106
Nuclear-active Particles in Young Air Showers. (E) Kh. P. Babayan, N. G. Boyadzhyan, É. A. Mamidzhanyan, N. L. Grigorov, Ch. A. Tret'yakova, and V. Ya. Shestoporov	80	46, 110
Investigation of the Fermi Surface of Aluminum by the Method of Quantum Oscillations of the High Frequency Surface Resistance. (E) E. P. Vol'skii	89	46, 123
Antiferromagnetic Resonance in CoCO_3 . (E) E. G. Rudashevskii	96	46, 134
Resonance Absorption of Gamma Quanta in Magnesium Stannide. 23.8 keV Absorption Line with the Natural Line Width. (E) V. A. Bryukhanov, N. Y. Delyagin, and R. N. Kuz'min	98	46, 137
An Investigation of the $\pi^+ p \rightarrow n \pi^0$ Charge Exchange Scattering and the $\pi^+ + p \rightarrow n + \eta$ ($\eta \rightarrow 2\gamma$) Reaction in the 1.55—1.6 BeV/c region. (E) V. V. Burmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskii, and V. A. Shebanov	102	46, 142
Texture in Layers of Hydrogen Isotopes Condensed on a Cooled Substrate. (E) V. S. Kogan, A. S. Bulatov, and L. F. Yakimenko	107	46, 148
Some Properties of the Central Macroscopic Vortex in Rotating Helium. (E) D. S. Tsakadze	110	46, 153
Possible Existence of Onsager-Feynman Vortices at Temperatures Above the λ Point (E) É. L. Andronikashvili, K. B. Mesoeid, and Dz. S. Tsakadze	113	46, 157
Thermomechanical Effect Near the λ Point in Rotating Liquid Helium. (E) L. A. Zantardze and Dz. S. Tsakadze	116	46, 162
On the Irrotational Region in Rotating He II. (T/E) M. P. Kemoklidze and Yu. G. Mamaladze	118	46, 165
Measurement of the Polarization of Protons Elastically Scattered on D^2 , T^3 , and He^3 Nuclei. (E) N. A. Skakun, A. G. Strashinskii, and A. P. Klyucharev	120	46, 167
Conditions for Heating up of a Plasma by the Radiation from an Optical Generator. (T) N. G. Basov and O. N. Krokhin	123	46, 171
Angular Correlations Near the Threshold of Formation of an Unstable Particle. (T) L. M. Lazarev	126	46, 176

Available From American Institute of Physics
 Soviet Physics - JETP
 Vol XIX, No 1

(Continued)

	Page	Russian Reference
Resonance Interaction of Radiation with a Medium. (T)		
A. P. Kazantsev and V. S. Smirnov	130	46, 182
Infinito Time Formalism in Quantum Field Theory. (T)	133	46, 187
An Integral Equation for the $\omega_0 \rightarrow 3\pi$ Decay. (T)	139	46, 196
Equations of Motion and State for Magnetoelastic Media. (T)		
K. B. Vlasov and B. Kh. Ishmukhametov	142	46, 201
Boundary Energy of a Fermi Gas in a Potential Well. (T)		
S. A. Gurvits, A. A. Migdal, and A. M. Polyakov	149	46, 213
Threshold Anomalies in the Photoproduction of Pions on Nucleons. (T)	152	46, 218
Rotation of the Plane of Polarization of Ultrasound in Metals in a Strong Magnetic Field. (T)		
K. B. Vlasov and B. N. Filippov	156	46, 223
On the Possible Scheme of Production of Λ Hyperons Via Isobars in π^+p -Interaction at 7-8 BeV. (T)		
V. F. Vishnevskii, Tu Yüan-Ts'ai, V. I. Moroz, A. V. Nikitin, Yu. A. Troyan, Chiang Shao-Chün, Chang Wen-Yü, B. A. Shakhbazyan, and Yen Wu-Kuang	162	46, 232
Dispersion Relations for the Indices of Refraction and Absorption. (T)		
V. L. Ginzburg and N. N. McIman	169	46, 243
Dissociation of Diatomic Molecules During Beta Decay. (T)		
Yu. D. Oksyuk and V. I. Gerasimenko	176	46, 254
Interaction Between Electrons and Lattice Oscillations in a Normal Metal. (T)		
É. G. Batyev and V. L. Pokrovskii	181	46, 262
Regge Poles in the Problem of the Quasiclassical Potential Well at Energies Below the Bottom of the Well. (T)		
A. A. Fomin	187	46, 270
Theory of Coupled Electromagnetic and Acoustic Waves in Metals in a Magnetic Field. (T)		
V. G. Skobov and É. A. Kaner	189	46, 273
Optical Properties of Metals in the Case of a Weakly Anomalous Skin Effect. (T)		
G. P. Motulevich	199	46, 287
Photoproduction of Strange Particles at High Energies. (T)	204	46, 293
Theory of Conversion and Scattering of Electromagnetic Waves in a Nonequilibrium Plasma (T)		
I. A. Akhiezer, I. A. Danelya, and N. L. Tsintsadze	208	46, 306
Theory of Relaxation Processes in a Uniaxial Antiferromagnetic. (T)	212	46, 307
Oscillation of Photon Density in a Resonance Medium. (T)		
A. I. Alekseev, Yu. A. Vlovin, and V. M. Galitskii	220	46, 320
"Parametric Resonance" in Luminescence as a Multi-photon Process. (T)		
V. A. Khodovoi	227	46, 331
Spectral Representations in the Quasioptical Approach. (T)		
M. K. Joifanov and S. S. Knoruzhi	232	46, 339
Growth of Fluctuations Associated with Instability of a System. I. (T)	242	46, 354
Damping of a Nonlinear Longitudinal Monochromatic Wave in a Weakly Ionized Plasma. (T)		
R. Yu. Kucherov	251	46, 368
Radiation from Fast Electrons with Oriented Spins in a Magnetic Field. (T)		
I. M. Ternov, V. G. Bagrov, and R. A. Rzaev	255	46, 374
LETTERS TO THE EDITOR		
Change of Resonance Absorption Spectra of 23.8-keV Gamma Rays of Sn^{118} During Phase Transitions of the $\text{BiFeO}_3\text{-Sr}(\text{Sn}_{1/3}\text{Mn}_{2/3})\text{O}_3$ System. (E)		
K. P. Mitrofanov, A. S. Vuskov, G. Ya. Driker, M. V. Plotnikova, Pham Zuy Hien, Yu. N. Venetsev, and V. S. Shipin	260	46, 383
Stimulated Emission of Nd^{149} in CaF_2 at Room Temperature. (E)		
A. V. Kaminski, L. S. Kornienko, L. V. Makarenko, A. M. Prokhorov, and M. M. Fursikov	262	46, 396
Temperature Dependence of the Mössbauer Effect on Fe^{57} Impurity Nuclei in a Gold Lattice (E)	264	46, 389
A New Gas-discharge Track Detector: The Streamer Chamber. (E)		
B. A. Dolgoshein and B. I. Luchkov	266	46, 392
Optical Transitions Between Closely Spaced Impurity Centers and the Related Photoconductivity. (E)		
Sh. M. Kogan, T. M. Lifshitz, and V. I. Sidorov	268	46, 395
On the Superconductivity of Electrons at the Surface Levels. (T)		
V. L. Ginzburg and D. A. Kirzhnits	269	46, 397
Investigation of the Magnetic Properties of Dibenzenechromium and Ditoluenechromium Iodides at Very Low Temperatures. (E)	270	46, 399
Influence of a Magnetic Field on the Thermal Conductivity of Gases with Nonspherical Molecules. (E)	272	46, 401
Excitation and Dissociation of Molecules in an Intense Light Field. (T)		
G. A. Askar'yan	273	46, 403

Available From American Institute of Physics
Soviet Physics - JETP
Vol XIX, No 1

JOURNAL OF GENERAL CHEMISTRY

OF THE USSR

A translation of ZHURNAL OBSHCHEI KHIMII

A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 33, Number 7

July, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
Physicochemical Investigation of Binary Systems Formed by Furfural with Cresols — I. M. Bokhovkin and E. O. Vitman.	2030	2083
Physicochemical Analysis of the Ternary System Phenol — Acetamide — Monochloro- acetic Acid — I. M. Bokhovkin, Yu. I. Bokhovkina, and E. O. Vitman.	2034	2087
Solubility of Nitrocyclohexane in Aqueous Solutions of Nitric Acid and Nitrates — G. D. Efremova and G. G. Leont'eva	2037	2090
Application of the Polarographic Method to the Study of the Thermal Decomposition of Azines — N. P. Shimanskaya, L. Ya. Malkes, and V. D. Bezuglyi.	2040	2094
Polarographic Study of Azo Derivatives of Salicylic and α -Hydroxynaphthoic Acids — K. R. Voronova and A. G. Stromberg	2043	2098
Reaction of Sec- and Tert-Butyllithium with Esters of Benzoic, Phenylacetic, Hydrocinnamic, and Cyclohexanecarboxylic Acids — E. P. Kaplan, S. V. Zakharova, and A. D. Petrov.	2048	2103
Secondary Aminoalcohols and Their Esters — F. M. Cherkasova and G. S. Erkomaishvili.	2052	2106
Organic Insectofungicides. LXIX. Synthesis of Esters of Alkylcarbamic Acids Containing a Carbonyl Group in the Ester Radical — K. D. Shvetsova-Shilovskaya, N. N. Mel'nikov, and Z. I. Maksimova	2054	2109
Aminosulfides and Aminosulfones. XXVIII. Mechanism of Addition of Arylsulfonates to α,β -Unsaturated Compounds — I. Kh. Fel'dman and V. N. Mikhailova	2056	2111
Aminosulfides and Aminosulfones. XXIX. Reaction of p-Acetaminophenyloxymethoxy- sulfone with Amines — I. Kh. Fel'dman and L. F. Mikhieva.	2061	2116
Cyclopropanes and Cyclobutanes. XXX. Cyclopropanes and Cyclobutanes with p-Diphenyl and Naphthyl Radicals — Yu. S. Shabarov, N. I. Vasil'ev, N. K. Mamaeva, and R. Ya. Levina.	2065	2119
Synthesis and Transformations of Tertiary Acetylenic Alcohols of the 1,2-Diisolethane Series — V. P. Kuznetsova, N. P. Smetankina, and G. N. Goreva	2069	2123

Available From Consultants Bureau

(continued)

	P A G E	
	ENG.	RUSS.
Study of Hydroxydihydrofurans. X. 3,3-Dimethyl-1-p-Tolylolethynyl-1-Hydroxyphthalan — T. G. Melent'eva, L. A. Pavlova, and É. D. Venus-Danilova	2072	2126
Investigations in the Dipyrlylmethene Series. V. Synthesis of Unsymmetrical Dipyrlylmethenes and Dipyrlylmethanes — E. I. Filippovich, V. N. Luzgina, R. P. Evstigneeva, and N. A. Preobrazhenskii.	2076	2130
Synthesis of 1,12-Dodecanolide — G. G. Zapesochaya, I. A. Kovtun, I. K. Sarycheva, and N. A. Preobrazhenskii.	2080	2133
Ethers with an Allylic Double Bond. VIII. Etherification of Some Di- and Tetra- Substituted Allyl Alcohols with Primary Aliphatic Alcohols — V. I. Pansevich-Kolyada and B. K. Bogush.	2083	2137
Reaction of 1-Bromo-1-Nitro-1-Pentene and β -Bromo- β -Nitrostyrene with Some Compounds Containing Active Methylene Groups — A. S. Sopova, V. V. Perekalin, and O. I. Yurchenko	2087	2140
Reaction of 1-Bromo-1-Nitro-1-Propene and β -Bromo- β -Nitrostyrene with Cyclic Active Methylene Components — A. S. Sopova, V. V. Perekalin, and V. M. Lebednova.	2090	2143
Some Derivatives of β -Chloroethoxyvinylphosphonic Acid — V. S. Tsivunin, Gil'm Kamai, and S. V. Fridland	2093	2146
Reaction of Ethyltetrachlorophosphine with Vinyl Ethers — V. S. Tsivunin, Gil'm Kamai, and D. B. Sultanova	2096	2149
3,6-Endoxocyclohexanes and -Cyclohexenes. XII. Stereochemistry of Nucleophilic Addition to the C=C Double Bond in the 3,6-Endoxocyclohexene and 3,6-Endoxocyclohexadiene Systems — N. S. Zefirov, Yu. K. Yur'ev, L. P. Prikazchikova, and M. Sh. Bykhovskaya	2100	2153
Chemistry of Selenophene. XLVI. Reaction of ω -Benzoyl-2-Acetoseleophene with Hydroxylamine — Yu. K. Yur'ev, N. N. Magdesieva, and V. V. Titov	2105	2158
Furan Series. XXVIII. Synthesis of 2,5-Bis(β -Dialkylaminoethyl)Furans — K. Yu. Novitskii, Yu. K. Yur'ev, V. N. Zhingareva, and M. S. Yunusov	2110	2164
Reaction of 3-Quinuclidinone with Hydrazoic Acid — E. E. Mikhlin and M. V. Rubtsov.	2114	2167
Ability of Cyanoalkyl-Substituted Deoxybenzoin Derivatives to Cyclize and the Preparation of 5,6-Diphenyl-2-Piperidone — O. Yu. Magidson	2119	2173
Amines and Quaternary Ammonium Compounds. XIX. — A. T. Babayan, M. G. Indzhikyan, and Zh. G. Gegelyan.	2123	2177
Amines and Quaternary Ammonium Compounds. XX. Alkaline Cleavage of Ammonium Salts Containing an Electron-Acceptor Group in δ -Position of the β,γ -Unsaturated Group — A. T. Babayan, M. G. Indzhikyan, and Zh. G. Gegelyan	2127	2181
Addition of Piperidine and Morpholine to Chalcones — N. S. Kozlov and G. N. Kozlov.	2130	2184
Condensation of Unsymmetrical Dipropyl- and Dibutylhydrazines with Acrolein and Methacrolein — B. F. Ioffe and E. I. Sabinina	2134	2188
Isomerization, Orientation and Steric Hindrance in the Sulfuric Acid-Catalyzed Alkylation of o-Xylene, p-Xylene and Mesitylene with Alcohols — B. V. Ioffe and Tszan-Si Yan	2141	2196
α -Alkylidenation of Some Cyclohexanones — V. A. Barkhash, G. P. Smirnova, A. T. Prudchenko, and I. V. Machinskaya	2146	2202
Reactions of Hydrazine Derivatives. XXXVIII. Cyanoethylation of Hydrazine and Acyl Hydrazines — S. I. Suminov and A. N. Kost	2152	2208
Cycloalkylation of Aromatic Compounds. XXIV. Cyclohexylation of Acenaphthene — N. G. Sidorova and F. M. Saidova	2157	2213

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	
	ENG. RUSS.	
The Synthesis of Substituted Phenylhydrazones of Nitroformaldehyde — L. S. Pupko, I. N. Berzina, and P. S. Pel'kis	2161	2217
Derivatives of 1,6-Diphenylhydrazodithiocarbonamide — R. G. Dubenko and P. S. Pel'kis . . .	2164	2220
Arylamides of Substituted Thioacetic Acid. I. Arylamides of Acetylthioacetic Acid and Its Derivatives — A. N. Borisevich, A. D. Grabenko, and P. S. Pel'kis	2167	2223
Studies in the Series of Substituted Arylamides of Dithiocarboxylic Acids. VI. Synthesis of Aryazo Derivatives of Arylamides from Monothiomalonic Acid and Its Esters — A. D. Grabenko, L. N. Kulacva, and P. S. Pel'kis	2170	2227
Condensation and Cyclization of Arylazochloroacetic Acids. I. 4-Phenyl Substituted Δ^2 -1,3,4-Oxadiazolin-5-Ones — M. O. Lozinskii, P. S. Pel'kis, and S. N. Sanova	2174	2231
Ion Exchange Resins as Catalysts in Organic Synthesis. I. Alkylation of Phenol by a Mixture of n-Amylenes in the Presence of Cationite KU-2 — S. P. Starkov, L. G. Fedosyuk, D. K. Zakharova, and E. N. Baturina	2178	2236
The Infrared Spectra of Hydroxyphenyl Diazonium Compounds in the Region 2100-2300 cm^{-1} — L. A. Kazitsyna, B. S. Kikot', L. D. Ashkinadze, and O. A. Reutov	2180	2238
Infrared Spectra of Diazonium Salts of Pentavalent Antimony — L. A. Kazitsyna, A. V. Kuznetsova, and O. A. Reutov	2186	2245
Halides of 8-Nitro-1-Naphthoic Acids — A. P. Karishin	2189	2247
Halogen Derivatives of the Lactam of 1-Amino-8-Naphthoic Acid (Naphthostyryl Halides) — A. P. Karishin	2192	2250
The Synthesis and Reactions of 2,2'-Dithienyl Sulfide. V. — B. P. Fedorov and F. M. Stoyanovich	2194	2251
The Ultraviolet and Infrared Spectra of 2-Thienyl Sulfides. VI. — E. M. Popov, F. M. Stoyanovich, B. P. Fedorov, and G. M. Andrianova	2203	2261
NMR Spectra of Alkoxyethyl Ethyl Malonic Acids and Their Esters — O. S. Stepanova, Yu. Yu. Samitov, and E. A. Yatsenko	2208	2267
Alkane Sulfonyl Esters of Quinone Oximes — E. A. Titov, S. I. Burnistrov, and D. E. Brazhnik	2212	2270
Study of Some Nitro Compounds of 2,2'-Dithienyl. II. — A. E. Lipkin	2216	2274
Diaryldi(β -Chloroethyl)Amides of Phosphoric Acid — L. B. Rapp and I. I. Kuz'menko	2219	2277
Synthesis and Investigation of Functional Organosilicon Compounds with a Carbon Bridge between Silicon Atoms. II. Synthesis of Pentaalkylchloro-1,2-Disilylethanes, and Acetylenic Alcohols and Vinylacetylenic Hydrocarbons Based on Them — N. P. Smetankina, V. P. Kuznetsova, and V. Ya. Oprya	2222	2281
Aryldiethylenetriamides of Phosphorothioic Acid — L. D. Protsenko and N. Ya. Skul'skaya . .	2225	2284
Bifunctional Catalysis by Carboxylic Acids in the Acylation of Aromatic Amines with Organic Acid Chlorides in Nitrobenzene Solution — L. M. Litvinenko and N. M. Oleinik	2227	2287
Synthesis and Investigation of Derivatives of Hydrazinedicarbothioic Acid Anilide Phenylhydrazide. I. Synthesis of Unsymmetrically Substituted Hydrazinedicarbothioic Acid Anilide Phenylhydrazides — R. G. Dubenko and P. S. Pel'kis	2237	2298
Diazastyrils with Substituents Containing Fluorine — L. M. Yagupol'skii and L. Z. Gandel'sman	2240	2301
The Dienophilic Activity of Di-(β -Chlorovinyl) Sulfoxide, Di-(β -Bromovinyl) Sulfoxide, and Di-(β -Bromovinyl) Sulfone — E. G. Kataev and F. R. Tantasheva	2246	2307
Reactions of Halogen-Containing Aromatic Compounds in the Presence of Hexamethyl- eneimine. II. The Replacement of the Chlorine Atom in Nitrochlorobenzoic Acids — V. N. Lisitsyn and T. I. Smirnova	2249	2311

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	ENG. RUSS.
Substituted Hydrazides of Hydroxycarboxylic Acids. XII. Symmetrical Diphenylhydrazides of Diaryl- and Dialkylglycolic Acids — I. S. Berdinskii and Ya. M. Vilenchik	2252	2313
Syntheses in the Phenothiazine Series. XI. 2-Aminophenothiazine — A. A. Cherkasova and S. V. Zhuravlev	2255	2315
Synthesis of Thiourea Derivatives. II. 4-Alkoxythiocarbonyl-4'-Carboxylic Acids and Their Salts — N. B. Galstukhova, I. M. Berzina, and M. N. Shukina	2257	2317
Reaction of Epichlorohydrin with Aminoanthraquinones — A. B. Tomchin and L. S. Éfros	2261	2321
Dipole Moments of Thymol and the Eugenols and Their Ethers and Esters — A. E. Lutskiĭ, A. F. Soldatova, and E. M. Obukhova	2267	2328
Influence of Sulfuric Acid on the Electronic Spectra of Substituted Acetophenones — A. E. Lutskiĭ and V. V. Dorofeev	2270	2331
Investigation in the Field of Benzodiazines. III. Tetrazole-Azidoazomethine Equilibrium in Some Quinazoline Compounds — I. Ya. Postovskii and I. N. Goncharova	2274	2334
Relative Velocities of Photochemical Conversions of Anthracene Derivatives — T. M. Vember, L. A. Klyanskaya, and A. S. Cherkasov	2281	2342
The Reaction of Halogenoanthraquinones with Primary Aromatic Amines. II. — T. N. Kurdyumova and L. I. Gorenshĭn	2286	2347
Investigations in the Field of Benzimidazole Derivatives. XIV. Amination of 1-Cyclohexyl- and 1-Phenylbenzimidazole — A. M. Simonov and A. F. Pozharskiĭ	2289	2350
Arenesulfamido Ketones — A. E. Kretov, E. A. Abrazhanova, S. I. Zlotchenko, and V. P. Kukhar'	2294	2355
Fluorination of 1,1,3,3-Tetrachlorophthalane Derivatives — L. M. Yagupol'skiĭ and R. V. Belinskaya	2297	2358
Mixed Polymethyne Dyes of the Indolizine Series — F. I. Stepanov and L. I. Lukashina	2303	2364
Furan Compounds. XXVII. Synthesis of Some 2-(Furyl-2')-1,3,4-Oxadiazoles and Furoylhydrazones — A. A. Ponomarev and Z. V. Til'	2307	2368
Stereochemical Investigations. XV. Spectropolarimetric Study of α -Benzylethylamine and Its Derivatives — V. M. Potapov, V. M. Dem'yanovich, and A. P. Terent'ev	2311	2372
Rearrangement of Aryl Esters of Arenesulfonylcarbamic Acids — S. I. Bunmistrov and V. L. Dubina	2315	2376
Derivatives of p-Sec-Butylbenzenesulfonic Acid — S. I. Bunmistrov, L. C. Romanovskaya, and O. S. Kas'yan	2319	2380
Synthesis of Unsaturated Ketones Containing Furan and Thiophene Nuclei — S. V. Tsukerman, I. K. Gintse, and V. F. Iavrushin	2322	2383
Catalytic Condensation of Schiff's Bases with Malonic Ester — N. S. Kozlov and A. D. Nikolaev	2326	2387
Thermal Decomposition of Some Organotitanium Compounds — L. M. Bobinova and G. A. Razuvaev	2329	2389
Reactions of Tetraphenyllead and Hexaphenyldiplumbane with Benzene — G. A. Razuvaev, G. G. Petukhov, and Yu. A. Kaplin	2334	2394
Reaction of Thiourea with α -Bromobutyric Acid. I. Effect of the Solvent on the Reaction Rate — V. L. Vasilevskii, E. D. Sverdlov, V. M. Fedoseev, and A. B. Silaev	2337	2397
Investigation of the Reactions and Derivatives of Quinaldine. II. Synthesis and Properties of Some Bis- α -Thioquinaldinamides — O. N. Chupakhin, Z. V. Pushkareva, and E. P. Darienko	2341	2401

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
Use of Multiple Labeled Compounds for Studying the Mechanism of the Isotope Exchange of Antimony in Its Methyl Derivatives — V. N. Nefedov, I. S. Kirin, V. M. Zaitsev, G. A. Semenov, and B. É. Dzevitskii.	2347	2407
Sulfonanilides. VII. Ethyl Esters of N-Arylsulfonyl-N-Phenylglycines — M. S. Malinovskii, Z. F. Solomko, and V. T. Braichenko	2350	2410
Terpenophenols. XI. Condensation of Norbornene with o-Cresol and Conversions of the Condensation Product — L. A. Kheifits, L. M. Shulov, A. V. Kokhimanskii, and V. N. Belov	2352	2412
LETTERS TO THE EDITOR		
Condensation of Pyrylium Salts with Some Amino Acids — Yu. A. Zhdanov, G. N. Dorofeenko, and A. N. Narkevich.	2357	2418
Synthesis of Phosphorus-Containing Heterocycles — Phospholine and Phospholidine — G. M. Bogolyubov, M. A. Razumova, and A. A. Petrov	2359	2419
Synthesis of New Derivatives of Bicyclobutane — I. A. D'yakonov, M. I. Komendantov, and V. V. Razin	2360	2420
Synthesis and Dehydration of Ditertiary γ -Glycols Containing Cyclopropyl Radicals — S. Kh. Begidov, I. A. D'yakonov, and I. K. Korobitsyna	2361	2421
Synthesis of Bis(Cyclopentadienyl)Titanium Bis(Trifluoroethylate) — G. V. Drozdov, A. L. Klebanskii, and V. A. Bartashev	2362	2421
Reactions of Diazoacetic Ester with 3-Trimethylsilylpropene-1 and 4-Trimethylsilylbutene-1 Catalyzed by Copper Sulfate — G. V. Golodnikov, I. A. D'yakonov, I. B. Repinskaya, and O. S. Fomina	2363	2422
Complexes of Alkylaluminums with Alcohols — G. A. Razuvaev and A. L. Graevskii	2364	2423
DISCUSSION		
Comment on the Article of Houlihan, Levy, and Mayer on the Structure of the Alcohol Obtained by Hydration of Myrcene — G. V. Pigulevskii	2365	2424
The Introduction of an International System of Units in the USSR.	2367	2426

Available From Consultants Bureau

JOURNAL OF GENERAL CHEMISTRY OF THE USSR

A translation of ZHURNAL OBSHCHEI KHIMII

A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 33, Number 9

September, 1963

CONTENTS

	P	A	G	E
	ENG.		RUSS.	
Production and Some Properties of Lanthanum Phosphide — G. V. Samsonov and S. N. Endrzhievskaya	2729		2803	
Interaction in the Ternary System Urea — Phenol — Naphthalene — A. G. Palobekov, L. I. U'yasov, and A. G. Bergman	2731		2804	
Electrolytic Formation of Organotin Compounds and their Chemical Properties — L. V. Kaabak and A. P. Tomilov	2734		2808	
Electro-Reduction of the Nitriles of Vinylacetic, Methacrylic, and Crotonic Acids — A. P. Tomilov, L. V. Kaabak, and S. L. Varshavskii	2737		2811	
Reduction of Nitriles at a Dropping Mercury Cathode — I. G. Sevast'yanova and A. P. Tomilov	2741		2815	
Synthesis of 1,2-Dimethylenecyclobutane — Ya. M. Slobodin and A. P. Khitrov	2745		2819	
The Question of the Dimerization of Allene — Ya. M. Slobodin and A. P. Khitrov	2748		2822	
Cyclopropanes and Cyclobutanes XXXI. The Chromatography of Arylcyclopropanes — R. Ya. Levina, P. A. Geinbitskii, E. S. Efremov, and E. G. Treshchova	2751		2825	
δ-Lactones and δ-Lactams XXXIII. Dichlorides of 3,4-Dihydropyrid-2-Ones — N. P. Shusherina, Khuan Khua-min', and R. Ya. Levina	2755		2829	
Synthesis of Alkyl Vinyl Ethers Synthesis of Vinyl Heptadecyl Ether and its Polymerization — B. I. Mikhant'ev and F. I. Yadreev	2760		2834	
Amides and Hydrazides of Oxalic Acid III. Basic Amides of N-Substituted Oxamic Acids — F. A. Petyunin and L. G. Kalugina	2762		2835	
Potential Antimetabolites VII. Substituted N-(Pyrimid-4-YL)-Aminoacids and their Derivatives — Yu. P. Shvachkin and M. K. Berestenko	2769		2842	
Potential Antimetabolites VIII. Methods of Passing from Pyrimidine Derivatives to Acyclic Aminoacids — Yu. P. Shvachkin and L. A. Sirtsova	2775		2848	
p-Di-(2-Chloroethyl)-Aminophenylalanine (Sarcosine) and its Derivatives X. New α-N-Acyl Derivatives of Sarcosine — E. N. Shkodinskaya, K. N. Kurdyumova, V. P. Androsova, and O. S. Vasina	2780		2853	
Available From Consultants Bureau			(continued)	

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
Reaction of Ketene with Nitrogen-Containing Bases XV — Dichloro- and Trichloroacetylated Amines — Yu. V. Svetkin	2784	2857
Telomerization of Allyl Chlorides with Olefins — M. L. Genusov and A. A. Petrov	2787	2859
Investigation in the Field of Conjugated Systems CLXXIII. Synthesis and Properties of the Ethyl Esters of Phosphonic Acids with Enyne Radicals — B. L. Ionin and A. A. Petrov.	2791	2863
Investigation in the Field of Conjugated Systems CLXXIV — Addition of Silicon Hydrides to 1-Trimethylsilyl-3-Methylbut-3-En-1-Yne — M. D. Stadnichuk and A. A. Petrov.	2796	2868
Investigations in the Field of Complex Lipids Synthesis of 2-Aminoethyl DL-2-Amino-2-Carboxyethyl Phosphate — Yu. S. Tsizin and N. A. Preobrazhenskii.	2800	2873
Investigations in the Field of Complex Lipids Synthesis of Symmetrical and Unsymmetrical α-Cephalins — V. L. Shvets, L. V. Volkova, S. F. Ryzhenkova, É. E. Lukashenko, and N. A. Preobrazhenskii.	2803	2876
Investigations on Complex Lipids Synthesis of L-(+)-Dilinoeoylphosphatidylethanolamine, L-(+)-Dilinoeoyl-α-Cephalin — L. T. Dorofeeva, O. N. Tolkachev, and N. A. Preobrazhenskii	2807	2880
Investigations on Lipids A New Method of Preparation of α, β-Diglycerides — L. T. Dorofeeva, E. I. Kovshov, L. V. Volkova, and N. A. Preobrazhenskii.	2810	2883
Infrared Absorption Spectra of Pyrrole Derivatives and the Hydrogen Bond — L. D. Miroschnichenko, R. P. Evstigneeva, and N. A. Preobrazhenskii.	2812	2885
Synthesis of Substituted 3-Ketothiophanes by Dieckmann Cyclization — V. M. Derezhovskii, S. D. Mikhno, N. S. Kulachkina, V. B. Zhuk, and N. A. Preobrazhenskii	2815	2888
Syntheses on the Basis of Alkoxyethylalkylmalonic Esters V. Synthesis and Some Transformations of β-Methoxyethyl-Propylmalonic and β-Methoxyethylisopropylmalonic Esters — A. V. Bogatskii and L. P. Mikhailova.	2821	2894
Investigations on Unsymmetrical Organic α-Oxides XXI. Condensation of Isoprene Oxide with Sodium Acetoacetic Ester — F. G. Ponomarev, P. T. Poluektov and M. P. Alekseyuk.	2825	2898
Study of the Reaction of Titanium, and Tin Tetrachlorides with some Esters by the Method of Infrared Spectroscopy — V. L. Gaivoronskii and O. A. Ospov	2828	2901
Acid Chlorides and Esters of Some Alkyl- and Arylarsinous Acids — Gil'm Kamai and R. G. Miftakhova	2831	2904
Synthesis and Studies of Transformations of Glycols of the δ-Series IV. Study of Transformations of 1-Acetylcyclopentanol-1 and Dimethylbenzoylcarbinol — T. A. Favorskaya, Z. A. Shevchenko, and T. A. Kuznetsova	2836	2909
Synthesis and Study of Transformations of Acetylenic α-Glycols VII. Synthesis of 3-(1-Hydroxycyclopentyl-1)Butyn-1-ol-3 and Study of its Transformations under the Influence of Concentrated Sulfuric Acid — T. A. Favorskaya and A. S. Lozhnitsyna	2843	2916
A New Method of Synthesis of Esters of Phosphinic and Thiophosphinic Acids XXXIX. Addition of Partial Esters of Phosphorus Acids to Diallyl, Haloolefins and Vinyl Ethers — A. N. Pudovik, L. V. Kononova, and A. A. Guryeva	2850	2924
Substituted Pyridines 2,5-Dimethyl-4-Alkylpyridines — N. S. Prostakov, L. A. Gaivoronskaya, N. N. Mikhcheva, and N. P. Filippov	2854	2928

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

P A G E
ENG. | RUSS.

Esterification of Isomeric α - and γ -1,2,5-Trimethyl-4-Phenyl-4-Piperidols —N. S. Prostackov and N. N. Mikheeva, ...	2857	2931
Synthesis of Substituted N-Vinylacetanilides—Hsu Yu-wu, S. S. Skorokhodov, and A. A. Vansheidt, ...	2861	2935
Syntheses of Derivatives of N, N'-Bis-(β -Hydroxyethyl)Ethylenediamine Containing a Thioamido Group— I. V. Podgomaya and I. Ya. Postovskii, ...	2864	2938
Condensation of 8-Isocaffeinealdehyde with Alkyl Iodides of Heterocyclic Bases —B. P. Lugovkin, ...	2868	2942
Halogenation of Aromatic Silanes XIII. Chlorination of Phenylmethyldichlorosilane by Sulfuryl Chloride—G. V. Motsarev and V. R. Rozenberg, ...	2874	2947
Synthesis of Nitriles and Amides of β -Arylacrylic Acids—N. O. Pastushak, N. F. Stadnichuk, and A. V. Dombrovskii, ...	2877	2950
Derivatives of Phosphodiazole—G. F. Dregval' and G. I. Derkach, ...	2880	2952
Vinyl Esters of Phosphorous Acids II. α -Alkylmercaptovinyl Phosphates —Yu. G. Gololobov and L. Z. Soborovskii, ...	2883	2955
Synthesis and Investigation of Polyorganostannoxanes. III.—S. M. Zhivukhin, É. M. Dudikova, and N. B. Pshiyalkovskaya, ...	2886	2958
Heterogeneous Fluorination with Elementary Fluorine III. Fluorination of Hydroxylamine and Methoxyamine Hydrochlorides—A. Ya. Yakubovich, M. A. Énglin, and S. P. Makarov, ...	2890	2961
Heterogeneous Fluorination with Elementary Fluorine IV. Fluorination of Trifluoro- and Difluoro-Acetamides—M. A. Énglin, S. P. Makarov, A. N. Anisimova, and A. Ya. Yakubovich, ...	2892	2963
Chlorination of Organic Compounds and the Transformations of Chloro Derivatives II. 1,1,2,2,3,4-Hexachlorobutane, and Syntheses Based on It—A. N. Akopyan, A. M. Saakyan, and É. A. Dzhevadyan, ...	2894	2965
Perchloric Acid and Its Compounds as Catalysts in Organic Synthesis XI. Condensation of Phenol with Ketones—G. N. Dorofeenko, S. V. Krivun, and L. V. Cherkashina, ...	2899	2970
Amino Sulfides and Amino Sulfones XXX. Reaction of p-Acetamidophenyl Hydroxymethyl Sulfone with α - and β -Amino Acids and with Aliphatic Compounds, I. Kh. Fel'dman and L. F. Mikheeva, ...	2902	2973
Amino Sulfides and Amino Sulfones XXXI. Synthesis of Some Sulfonamides in which Heterocyclic Groups are Attached to the Sulfonyl Group—I. Kh. Fel'man and V. N. Mikhailova, ...	2905	2976
Epoxides of Higher Unsaturated Acids II. Reaction of Epoxides of Methyl Erucate and Brassidate with Acetic Acid—I. L. Kuranova, Yu. D. Shenin, and G. V. Pigulevskii, ...	2908	2980
Epoxides of Higher Unsaturated Acids III. Reaction of Epoxides of Erucic and Brassidic Acids with Acetic Acid—I. L. Kuranova, Yu. D. Shenin, and G. V. Pigulevskii, ...	2916	2988
Epoxides of Higher Unsaturated Acids IV. Reaction of Epoxides of Petroselinic and Petroselaidic Acids with Acetic Acid—I. L. Kuranova, Yu. D. Shenin, and G. V. Pigulevskii, ...	2923	2996
Tricyclic Analogs of Steroid Hormones. XI. —G. S. Grinenko, V. I. Aksanova and V. I. Maksimov, ...	2929	3002
Steroids XXI. Beckmann Rearrangement of Oximes of 3-Acyl-16 α , 17 α -Epoxyhydro- xyprenones—L. I. Klimova and N. N. Suvorov, ...	2937	3011

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	
	ENG. RUSS.	
Condensation of o-Aminobenzenethiol with Lactones - F. S. Babichev	2942	3016
Concentration and Effective Dipole Moment of Solute Molecules in Solution - A. E. Lutsii, E. M. Obukhova, and B. P. Kondratenko	2949	3023
Acyl Peroxides III. Reactions of Diacetyl and Acetyl Benzoyl Peroxides with 1,1,2,2,-Tetrachloroethane - Yu. A. Ol'dekop and R. V. Kabardin	2954	3028
Synthesis of 5-Methyl-6-(Trifluoromethyl)Benzimidazole - L. M. Yagupoli'skii and G. I. Matyushecheva	2957	3031
Absorption Spectra and Structures of Quinoline Derivatives that Serve as Starting Materials in the Preparation of Antimalarials VII. Interaction of Functional Groups in Isomeric Chloro-4-Aminoquinolines - V. I. Bliznyukov and L. S. Sokol	2961	3035
Migration of Chlorine in Chloronaphthoic and Chloronaphthalenesulfonic Acids - A. M. Komogorov and V. A. Koptiug	2966	3040
Some 3-Pyrazolidinone Derivatives II. 1-(Carboxyphenyl)-3-Pyrazolidinones - R. B. Zhurin and V. N. Ivina	2970	3044
Reaction of Phenol Ethers with Phosphorus Trichloride I. Reaction of 1,3,5-Methoxybenzene with Phosphorus Trichloride - I. S. Protopopov and M. Ya. Kraft	2975	3050
Carbonyl Compounds of Fluorene Series I. Synthesis of 9-Oxofluorene-3-Carboxaldehyde, Fluorene-2-Glyoxylaldehyde, 9-Oxofluorene-2-Glyoxylaldehyde, and 7-Glyoxyloyl- 9-Oxofluorene-2-Carboxylic Acid and of Some of their Derivatives - G. Ya. Uretskaya and M. Ya. Kraft	2978	3053
Some Reactions of 2-(Nitromethyl)Quinoline IV. Deacylation of the o-(Ethoxycarbonyl) Benzoyl Derivative under the Action of Bromine - L. P. Zalukaev and N. P. I'vova	2991	3056
Alkyl N-(Diphenoxyphosphinyl)Arenecarboximidothioates - V. A. Shokol, G. I. Derkach, and E. S. Gubnitskaya	2984	3058
Phosphorylated 2-Alkyl- and 2-Aryl-Pseudooureas - G. I. Derkach, A. V. Narbut, and A. V. Kirsanov	2988	3062
Infrared Spectra of Arenesulfonimidic Derivatives - E. S. Levchenko, É. S. Kozlov, A. A. Kisilenko, and A. V. Kirsanov	2991	3065
(Acylimido)Sulfinyl Chlorides and (Acylimido)Sulfurous Diamides - E. S. Levchenko, I. É. Sheinkman, and A. V. Kirsanov	2994	3068
Ultraviolet and Infrared Absorption Spectra of Some Nitrogenous 2,2'-Bithiophene Compounds. III - A. E. Lipkin, N. I. Putokhin, and B. V. Rassadin	2999	3073
Phosphoric and Phosphorothioic Esters Containing Heterocyclic Groups V. Compounds Containing Pyrazole Groups - B. A. Arbuzov, A. R. Vil'chinskaya, and V. A. Frinovskaya	3002	3076
Potential Cytotoxic Groupings III. N-Ethyl- and N-2-Chloroethyl-N-Arylsulfamic Esters - L. S. Yaguzhinskii and A. Ya. Berlin	3004	3078
Hydrolysis of Some 2,2'-Dichlorodiethylamines III. Retardation of Hydrolysis Under the Action of Sodium Chloride. - A. D. Chinaeva and A. Ya. Berlin	3009	3082
Reactions of Bis(Benzene)Chromium(O) and its Homologs with Alkyl Halides - G. A. Razuvaev, G. A. Domrachev, and O. N. Lruzhev	3011	3084
Catalytic Synthesis of 3-Phenylbenzo[f]Quinoline Derivatives - N. S. Kozlov, G. N. Kozlov, and E. A. Britan	3015	3089
Reaction of 2-Chlorovinyl Ketones with β -Dicarbonyl Compounds XIII. Acylvinilation of Ethyl 2-Butyrylbutyrate and 2-Benzoylbutyrate - V. F. Belyaev	3019	3093

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
Thermal Rearrangement of Unsaturated Phosphorous Esters — A. N. Pudovik and I. M. Aladzheva	3022	3096
Reactions of Phosphorous Esters with α-Keto Carboxylic and α-Keto Phosphonic Esters — A. N. Pudovik and I. V. Kononova	3026	3100
1,2-Dihydrobenz[cd]Indole Derivatives XI. 7-p-Aminophenylnaphthostyryl — N. S. Dokunikhin and G. I. Bystritskii	3031	3105
LETTERS TO THE EDITOR		
Synthesis and Wolff Rearrangement of 4-Diazodihydro-2,2,5,5-Tetramethyl-3(2H)-Furanone — I. K. Korobitsyna, L. L. Rodina, and L. M. Smashkova	3034	3109
Determination of the Relative Activities of Antioxidants from the Reduction in the Intensity of Chemiluminescence — V. Ya. Shlyapintokh, O. N. Karpukhin, and I. F. Rusina	3036	3110
BF₃O Derivatives of β-Diketones— a New Type of Quasiaromatic Compounds — A. P. Skoldinov, D. N. Shigorin, V. G. Medvedeva, and T. S. Ryabchikova	3037	3110
Metalation of Cyclopentadiene with Lithium, Sodium, and Potassium Aluminum Hydrides — L. I. Zakharkin and V. V. Gavrilenko	3039	3112
Cyanoethylation of 4-Aminopyridine — P. F. Butskus and A. I. Butskene	3040	3112
DISCUSSION		
V. F. Martynova's Paper "Reactions of Bis-p-Aminophenylmercury, Dibenzylmercury, Bis-p-Methoxyphenylmercury, and Di-p-Tolylmercury with Metals (Fe, Cu, Al, Zn). XII" — A. N. Nesmeyanov, A. E. Borisov, and A. N. Abramova	3041	3113
Available From Consultants Bureau		

JOURNAL OF APPLIED CHEMISTRY

OF THE USSR

A translation of (ZHURNAL PRIKLADNOI KHIMII)

a publication of the Academy of Sciences of the USSR

© 1964

CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 36, Number 6

June, 1963

CONTENTS

	P ENG.	A 	G RUSS.
Precipitation of Selenium from Nitroso Sulfuric Acid—S. I. Vol'fkovich, N. N. Kondrat'ev, N. K. Bartosevich, I. F. Morozov, and N. I. Panasova	1121		1169
The Decomposition Rate of Apatite in Unsaturated Solutions of the System $\text{CaO}-\text{P}_2\text{O}_5-\text{H}_2\text{O}$ —M. E. Pozin, B. A. Kopylev, and I. P. Kyrshv	1127		1175
The Solubility of Phthalocyanines in Chlorosulfonic Acid and Oleum—B. D. Berezin, . . .	1133		1181
Phase Composition and Luminescence Properties of the System $\text{Zn}_3(\text{PO}_4)_2-\text{Ca}_3(\text{PO}_4)_2$ —R. A. Babitskaya and L. Ya. Markovskii	1138		1186
The Ionic Conductivity of Alkali Aluminosilicate Glasses—R. L. Myuller and A. A. Pronkin	1144		1192
Dissolution Kinetics of Some Fluoroberyllate Glasses in Water—N. I. Grebenshchikova and G. T. Petrovskii	1151		1199
An Investigation of the Viscosity of Fluoride Glass-Forming Systems—E. N. Krestnikova and G. T. Petrovskii	1156		1205
Spectrophotometric Determination of the Dissociation Constants of Hypochlorous Acid at Different Temperatures—S. M. Osinska-Tanevskii, M. K. Bynyaeva, K. P. Mishchenko, and I. E. Flis	1162		1212
Continuous Ion Exchange in Multistage-Countercurrent Type Apparatuses with with a Suspended Layer of Ionite. A. A. Komarovskii	1167		1217
Equations of the Ion Balance and Mass-Transfer Kinetics During Continuous Ion Exchange in Multistage-Countercurrent Apparatuses with a Suspended Layer of Ionite. A. A. Komarovskii	1173		1224
Liquid-Vapor Equilibrium in Chloroform-Hexane and Acetone-Chloroform Systems —L. S. Kudryavtseva and M. P. Susarev	1180		1231
An Investigation of the Kinetics of Distribution of Benzoic Acid Between a Nonpolar Solvent and Water—T. S. Komienko and M. Kh. Kishinevskii	1186		1238
The Molecular State of $\text{AlF}_3-\text{NaF}-\text{Al}_2\text{O}_3$ Fused Systems—B. F. Yudin and V. P. Mashovets. A Method of Measuring the Saturated Vapor Pressure and Density of Aqueous Solutions at Temperatures up to 350° and Pressures up to 200 kg. cm^{-2} —I. A. Dibrov, V. P. Mashovets, and M. K. Fedorov	1192		1244
	1198		1250

(Continued)

Available From Consultants Bureau

CONTENTS (continued)

	PAGE	RUSS. PAGE
Oxidation of Magnesium by Water at Elevated Temperatures and Pressures —A. V. Shreider, G. L. Degtyareva, and S. V. Sukhacheva.	1201	1254
Purification of Technical Sodium Carboxymethylcellulose—M. Kh. Gluzman, G. S. Bashura, and I. B. Levitskaya.	1205	1258
Parallel Investigation of the Corrosion Rate of Pipes and Rotating Disks under Diffusion Monitoring Conditions—L. A. Poluboyartseva, P. I. Zarubin, and V. M. Novakovskii .	1210	1264
The Corrosion of Lead in Moist Soils with Polarization by Alternating Current —Yu. N. Mikhailovskii	1219	1273
The Thermodynamic Properties of Liquid Alloys in the Na—Zn System—M. F. Lantratov, A. G. Morachevskii, and M. I. Antonova	1224	1278
A Study of the Structure and Physicochemical Properties of Electrolytic Brass —G. P. Andreeva, N. P. Fedot'ev, P. M. Vyacheslavov, and I. Ya. Pal'mskaya.	1229	1283
Cathodic Polarization During the Deposition of Tellurium from Alkaline Solutions —G. A. Simonov, L. K. Simirnova, and A. L. Rotinyan.	1236	1291
A Polarographic Method for the Quantitative Determination of Anabasine—A. S. Sadykov, O. S. Orshchenko, V. B. Leont'ev, and E. Tuichiev	1241	1296
Some New Types of Plasticizer for Polyvinyl Chloride—V. A. Voskresenskii, L. M. Kozlov, and M. V. Karaseva	1245	1300
The Preparation of Cellulose Ethers Containing Substituents with a Branched Hydrocarbon Chain—E. A. Plisko, I. G. Topunova, and S. N. Danilov	1248	1303
The Reaction of Alcohols and Amines with NN'-Methylenediacylamide and with Cyclic NN'N''-Trimethylenetriacylamide—R. I. Gruz, A. A. Vansheidt, F. A. Kryuchkov, L. M. Pozin, and N. V. Kanevskaya	1252	1307
The Ultraviolet Spectra of Condensed Lignins—V. M. Reznikov, G. V. Sviderik, V. L. Levdikova, and G. D. Ponurova	1259	1314
The Concentration of Aqueous Solutions of Formaldehyde by Azeotropic Rectification with Hydrocarbons—S. K. Ogorodnikov and A. I. Morozova	1266	1322
The Preparation of Samples of Cellulose with Different Packing Density of the Macromolecules—V. I. Sharkov and T. A. Shcheglova	1269	1326
Vat Dyes Derived from the Imide of 1,8-Naphthoylene-1',2'-Benzimidazole-4,5- Dicarboxylic Acid—B. M. Krasovitskii, V. L. Plakidin, E. E. Khotinskaya, E. F. Kravchenko, L. M. Golomb, and M. G. Romanova	1273	1330
Preparation of Copolymers of N-Substituted Methacrylamides with Styrene and Methylmethacrylate and a Study of Their Properties—M. M. Koton, S. L. Dobretsov, and T. A. Sokolova	1278	1335
BRIEF COMMUNICATIONS		
The Influence of the Hydration of Ions on the Process of Alignment in Electrolyte Solutions—V. P. Troshin	1284	1342
Relative Method for Measuring the Hydration Numbers of Ions in Electrolyte Solutions at High Concentrations—V. P. Troshin	1287	1344
The Use of Acetone Cyanohydrin in the Cyanomethylation of Some Secondary Amines —O. M. Lerner and I. Kh. Fel'dman	1290	1347
Recovery of Iodine from Aqueous Solutions with Gelatin Foam—R. V. Shvchikina and S. G. Mokrushin	1292	1348
Oscillographic Measurement of the Values of pH in the Catholytic Layer —T. M. Ovchinnikova, I. M. Plekhov, and A. L. Rotinyan	1294	1350
A Method for the Experimental Study of the Equilibrium Between Liquid and Gas in a in a Ternary System—A. G. Morachevskii	1297	1353

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
Some Properties of Acidic Solutions of Zinc Sulfate—V. M. Chaikovskaya, G. F. Afanas'ev, and G. N. Znamenskii, ...	1300	1355
Determination of the Yield Based on Current During Electroforming Treatment —I. K. Trushin, ...	1303	1357
A Comparative Study of the Throwing Power of Chromium Electrolytes—A. N. Sysoev, and N. T. Drobanseva	1306	1360
A Laboratory Electrolyzer for the Electrolysis of Organic Substances in Heterogeneous Media—A. P. Tomilov	1309	1362
Extraction of Microimpurity Cations from Tartaric Acid Solutions onto Active Carbon as Their Cupferronate Complexes—G. I. Gorshtein and N. S. Dmitrieva	1313	1365
The Reaction of Aliphatic Dinitriles with Oleic Acid by the Ritter Reaction —A. E. Kulikova, S. V. Meiman, and E. N. Zil'berman, ...	1316	1367
The Effect of Alkali Soluble Impurities of Melamine on Polycondensation and the Consolidation of Melamine-Formaldehyde Resins in Dependence on the pH of the Reaction Medium—A. E. Zarubitskii, ...	1318	1368
Aceperinones—Dyes for Capron (Polycaprolactam) in the Mass—B. M. Krasovitskii, E. F. Kravchenko, and E. A. Shevchenko, ...	1320	1370
Leonid Petrovich Zherebov and His Work on the Chemistry of Wood and on Chemical Technology—V. P. Sumarokov	1323	1372
BIBLIOGRAPHY		
Review of Investigations of the Electrochemistry of Molten Salts in 1962 —A. G. Morachevskii and B. V. Patrov, ...	1325	1374
Handbook of Chemistry, Vol. 1, 2nd Edition, Principal Editor E. P. Nikol'skii —I. G. Filatov, ...	1341	1387
Ion Exchange Separations in Analytical Chemistry, Olaf Samuelson—A. M. Trofimov, ...	1343	1389
The Formation of Furfural and Methods for Preparing It, V. N. Sergeeva and G. E. Dornburg—D. V. Zheltukhin	1344	1390
The Chemistry of Wood, A Short Essay, K. Kurschner—D. V. Zheltukhin, ...	1346	1391
Available From Consultants Bureau		

JOURNAL OF STRUCTURAL CHEMISTRY

A translation of *ZHURNAL STRUKTURNOI KHIMII*,
a publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 4, Number 5

September-October, 1963

CONTENTS

	P ENG.	A RUSS.
X-Ray Investigation of Aqueous Solutions of Fluoboric Acid — A. L. Ryss and L. V. Radchenko . .	611	659
Nuclear Relaxation and the Structure of Vanadyl Salt Solutions — A. I. Rivkind	615	664
Paramagnetic Relaxation Times of Rare-Earth Ions in Liquid Solutions — M. M. Zaripov	623	674
The Influence of Stabilization of the Structure on the Coordination Numbers of Alkali Metal Cations in Aqueous Solutions — M. N. Buslaeva and O. Ya. Samoilov	630	682
Effect of an External Electric Field on the Frequency of Nuclear Quadrupole Resonance — I. D. Pichankhchi and A. M. Ivanchenko	633	687
Infrared Spectra of Ester Complexes with Electron-Acceptor Metal Halides — D. S. Bystrov . .	638	691
Infrared Absorption Spectra of Some Simple Hydrides — V. I. Mikheeva and N. N. Mal'tseva . .	643	698
Vibrational Spectra of Silicates with Si_4O_{12} Anions — A. N. Lazarev and T. F. Tenisheva	647	703
Some Quantitative Relationships in Structures Derived from the fluorite Type — Yu. A. Pyatenko	651	708
An X-Ray Diffraction Study of Some Double Oxides of Uranium and Vanadium — Wang Shin-hua, L. M. Kovba and V. L. Spitsyn	656	714
Preparation and Structure of Some Tungstates of M_2WO_6 Type — L. N. Belyaev, V. S. Filip'ev and E. G. Fesenko	660	719
The Structure of the Products Obtained by Igniting Certain Salts of 12-Phosphotungstic Acid — A. A. Babad-Zakhryapin	665	724
Determination of the Stablest Molecular Configurations by the Method of Maximum Overlap — V. M. Volkov and M. E. Dyatkina	668	728
Some Two-Center Integrals in the Theory of Molecules — V. M. Zaitsev and V. A. Mokeeva . .	674	734
Use of Symmetry in the Method of Maximum Overlap — A. A. Levin	679	739
Systematics of Structure Types — G. B. Bokil and N. L. Smirnova	684	744
The Determination of the Number of Stereoisomers of Complex Compounds — L. V. Krivoshei .	695	757
BRIEF COMMUNICATIONS		
Nuclear Magnetic Resonance in Uranyl Nitrate Crystal Hydrates — N. M. Aleksandrov, V. M. Vdovenko, A. P. Sokolov, and V. A. Shcherbakov	699	762
Change of Multiplicity of the Nuclear Quadrupole Resonance Spectrum in Octachloronaphthal- ene Crystals — V. S. Grechishkin and G. B. Solfer	700	763

Available From Consultants Bureau

(continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
The Coordination State of Titanium in Completely Crystallized Products from Certain Systems — Ya. S. Bobovich and G. T. Petrovskii	702	765
The Crystal Structure of $BaB_2O_4 \cdot 4H_2O$ — V. B. Kravchenko.	705	768
Space Groups and Unit Cells of Organic Compounds. Part 1. Derivatives of Ethanoanthracene, Dodecahydrophenanthrene and Cyclohexene — O. P. Osipova and Yu. T. Struchov	707	770
Space Groups and Unit Cells of Organic Compounds. Part 2. Peri-Disubstituted Naphthalenes — Z. A. Akopyan, R. L. Avoyan and Yu. T. Struchkov	709	772
The Electronic Structure and Properties of Cumulene Systems. 2. Elasticity and Energetic Spectra of Inorganic Cumulenes — E. M. Shustorovich	710	773
Dependence of Molecular Refractions on the Chemical Structure of Alkylbenzenes, the Size and Number of Substituents — V. E. Nikitenkov	713	776
 REVIEWS		
The Modern State of Gaseous Electron Diffraction. Theory of Scattering of Electrons by Molecules — V. P. Spiridonov, N. G. Rambidi, and N. V. Alekseev	717	779
 CHRONICLES		
Third All-Union Conference on the Use of Computers in the Structural Analysis of Crystals — V. I. Simonov	736	798
 BIBLIOGRAPHY		
International Union of Crystallography, Commission on Crystallographic Data. List of Works Con- taining New Data on Crystal Structures, 1961. B. Inorganic Compounds	739	801
 Available From Consultants Bureau		

INDEX TO AUTHORS

This index does not include authors listed in the cover-to-cover tables of contents.

- A -

Abdushukurova, R. A.	22
Abramson, I. S.	45
Acena, Vicente Caffarena	12
Adachi, T.	40
Adamczyk, H.	26
Adamczyk, R.	26
Afanasyev, Ye. V.	34
Airapetyan, V. G.	23
Akaboshi, Sanya	31
Akhmatov, S.	3
Akhmetzyanov, M. Kh.	44
Akulichev, I. T.	34
Al-A'war, Amir	13
Albrecht, J.	42
Albrecht, Roman	6
Aleksandrov, N. I.	24
Aleksi, Aleko	10
Aleksic, Mihailo	8
Aleksic, Milan	8
Aleshchenko, S. P.	35
Aleshchenkov, P. I.	42
Alfsen, Annette	25
Ali, Abu Feras	12
Alikhanov, E.	2
Al'pert, Ya. L.	32
Al'shits, I. M.	29
Ambroziak, A.	35
Anan'yev, B. G.	43
Andrade e Silva, J.	43
Anghene, Mircea	9
Anh, Vu	15
Ankut, P. P.	39
Anta, M.	45
Anthonisen, P.	25
Apollo, Boris Aleksandrovich	32
Arifozhanov, K. A.	23
Arkhangel'skiy, B. A.	29
Arnitis, M. A.	35
Askerov, N. G.	43
Astasenkov, P. T.	34
Astashenkov, Petr Timofeyevich	20
Astori, Rocco	11
Atanasov, Atanas	6
Averbuch, V. L.	21

Averkiyev, V. P.	34
Aver'yanov, K.	2
Aytkhozhin, M. A.	21

- B -

Babenko, N. V.	19
Babskiy, Ye. B.	20
Baci, Maser	19
Bagriy, P.	4
Bakdash, Khalid	13
Bakhrin, P. I.	4
Balabanov, E. I.	29
Balandin, G. F.	38
Balashov, V. V.	43
Balashov, Yu. S.	22
Baljinnyam, B.	16
Barabashov, N. P.	32, 33
Baranov, N. N.	19
Baranovskiy, F. T.	41
Barany, Janos	33
Barany, Lajor	7
Barbeau	12
Bardizh, V. V.	41
Barmin, V. V.	45
Barthoux, A.	42
Barzyalis, L. S.	23
Bassi, A.	40
Bauman, L. K.	23
Bautz, W.	36, 37
Bayburtsyan, A. A.	21
Baychinski, Kostadin	9
Bayevskiy, R. M.	34
Beda, N. I.	3
Belay, Jozsef	7
Belitsina, N. V.	21
Bell, L. H.	21
Bella, Sita	11
Belyayev, I.	5
Bembinek, Yu. E.	39
Benesovsky, F.	46
Ben'yaminovich, M. B.	39
Berkovich, S. Ya.	41
Berlin, A. A.	29
Berlin, I. Z.	21
Berman, L. D.	36
Bertani, Guiseppe	26

Bespalov, M.	4	Buntser, Ya. M.	23
Bessmertnyy, B. S.	21	Buraggi, G. L.	26
Bezgin, L. S.	44	Burlay, P. F.	1
Bezruchko, V. S.	35	Burnelle, Ernest	11
Bezuglyy, S. F.	19	Burns, W. G.	31
Bezukhov, V. N.	39	Burssens, H.	12
Bielecki, B.	28	Busalaye, I. V.	41
Bierwirth, G.	36	Bussmann, B.	40
Bilinskiy, I. Ya.	35		
Billard, F.	39, 42		
Billard, P.	34	- C -	
Bishara, E. I.	21		
Blanchard, R.	30	Caglione, P.	42
Bobkov, V. V.	32	Camona, G.	40
Boborykin, A. D.	5	Camozzo, G.	30
Bochirol, L.	30	Capron, Freddy	11
Bogomolov, L. A.	3	Cayola Da Mota, L.	28
Bohenszky, G.	35	Cesselin, P.	40
Bokor, Z.	35	Chan, P'eng	17
Boldingh, J.	25	Chang, Cheng-pin	30
Bolliger, J.	10	Chang, Hui-min	39
Bondarevskiy, Yu. P.	4	Chang, Ling	13
Bonnivard, G.	40	Chang, Te-hua	17
Borisenok, I. T.	41	Chang, Te-min	14
Borisov, P. G.	21	Chang, Tseng-yu	17
Borod'ko, S. L.	24	Chao, Wan-yu	13
Borovskiy, B. B.	38	Charakhch'yan, A. N.	33
Boshenszky, G.	35	Chauchard, Paul	25
Boyarkina, A. N.	43	Ch'en, Te-ch'ien	33
Bradeanu, P.	37	Chentsov, B. V.	23
Bragard, A.	36	Chentsov, R. A.	34
Bragin, V. F.	3	Cheprakov, V.	5
Brahimi, Razi	10	Cherevko, P.	3
Brauer, H.	40, 42	Cherkashina, L. G.	29
Bresler, S. Ye.	21	Chernov, I. A.	44
Briefs, H.	40	Chertkov, L.	2
Brisk, B.	25	Chevalier, G.	39
Brodskiy, V. M.	41	Chizhov, A. F.	33
Broothaerts, J.	30	Cholinski, Tadeusz	8
Brueckner, Horst	30	Chon, Tae-yong	14
Bruncau, J.	25	Chonkich, Stevan	9
Brunfaut, M.	23	Chretien-Marquet, H.	10
Buchholz, G.	37	Chu, Ping-ch'iu	39
Budaragin, V.	5	Chulumbat, D.	5
Budnitskaya, Ye. V.	23	Chupyr', V.	4
Budyko, M. I.	32, 33	Cieslinska, A.	27
Bugalska, Maria	7	Cindro, Nikola	43
Bugrov, A.	4	Claussen, F.	37
Buhl, R.	46	Cmelik, S.	25
Bui, Duc Tam	16	Coenen, W.	31
Bui, Huy Dap	15	Colobert, L.	25
Bulatova, T. I.	24	Cortissone, C.	43
Bunich, P.	2	Cotti, P.	46
Bunimovich, V.	1	Cristian, D.	33
Bunte, Karl	30	Croce, Max	12

Czarnowska, K.	20
Czech, A.	36
Czernik, A.	28
Czerwinski, Witold	31
Czyzewski, K.	28

- D -

Dagis, R. S.	41
Dambadarjaa, Yo	15
Damdin, H.	17
Danalache, Florian	9
Danchev, Vladimir	6
Danielewicz, J.	27
Danikov, V. N.	44
David, H.	46
Davidov, Ye. R.	21
Debiec, B.	27
de Bortoli, M.	42
Debrie, G.	42
De Castro Soares, A. B.	28
Delanghe, G.	45
Delpont, J. P.	46
Demidova, A. A.	38
Den Hartog, H. W.	30
Detilleux, E.	30
Detlovs, V. K.	41
Detrez, P.	36
Dezsi, I.	46
Diaz, C. Jimenez	29
Didkovskiy, V. P.	38
Dietl, B.	28
Dimitrov, V.	1
Dittmann, H.	34
Emitriyev, O. F.	44
Doan, Trong Tuyen	15
Dolgolenko, A. G.	45
Dollfus, Audouin	45
Domaniowski, Janusz	26
Domanski, Jerzy	18
Domdey, K. H.	6
Domdey, Karl-Heinz	7
Dominas-Kuczkowska, H.	28
Dominik, Tadeusz	28
Dorman, L. I.	43
Dosmukhamedov, Zh.	3
Dostal, Milos	42
Drace, Dzemaal	9
Dracheva, N. P.	18
Dremin, A. N.	45
Drobyshev, G. F.	41
Drozdz, M.	20
Drzysztalowska, H.	20
Dubina, T. L.	24

Dubovik, A. S.	44
Du Castel, Francois	34
Dudarev, V. P.	29
Dudko, D. A.	38
Duverney, R.	45
Duzevic, Stipe	9
D'yachenko, P. E.	35
Dzundui, D.	17

- E -

Ebert, K. F.	30
Edel'man, F. L.	39
Egorov, Yu. M.	32
El'piner, I. Ye.	23
Emanuelli, H.	26
Emel'yanova, O. S.	24
Endo, T.	40
Entin, I. I.	2
Erk, A.	34
Eremenko, O. M.	29
Estrin, M. I.	44
Ewald, P. P.	46
Eydel'steyn, S. I.	21
Eynde, Van den	13
Eyrich, Werner	35

- F -

Fadyeyev, N. N.	44
Fadyev, Ye. V.	22
Fakir, Mukhammed	43
Falkovich, S. V.	44
Falkowska, Z.	27
Fan, Ts'un-yi	39
Favre, Henry	37, 45
Faytel'berg-Blank, V. R.	29
Fedorchenko, A. N.	46
Fedorovich, M.	4
Fedorus, Z. P.	46
Fedoryakov, P.	3
Fedotova, Yu. M.	24
Feigl, Fritz	40
Fencsik, Laszlo	9
Filho, Lins	28
Filippov, N. V.	43
Filippova, T. I.	43
Filonov, I. G.	4
Firsov, L. A.	23
Fischer, Hans-Joachim	35
Flossmann, R.	37
Foltyn, Jiri	20

Fontanges, R.	25
Fontein, F. J.	40
Franco, L. Vega	29
Francois, Pierre	12
Frank, G. M.	42
Frankevich, E. L.	29
Frasheri, Xhemil	9
Freudo, J.	28
Frkovic, Mirko	6
Fukui, Keinchi	31
Fukumoto, J.	26
Furduyev, P. V.	1

- G -

Gabovich, M. D.	46
Gaeumann, T.	31
Gagarina, M. I.	19
Gaillard-Cusin, F.	45
Gal'burt, A.	1
Gal'perin, N.	1
Garger, K. S.	39
Gasecki, W.	27
Gaytskhoki, V. S.	23
Geckeler, J.	36
Gefen, N. E.	24
Gegesi, Kiss	26
Gelo, J.	20
Genig, V. A.	21
Genin, M. A.	41
Genshaft, Yu. S.	45
Georgiyev, G. I.	23
Gerlif, G.	10
Gevrekov, Iliya	6
Gieldanowski, J.	27
Ginsburg, N. N.	24
Giorza	25
Gjebrea, Pellumb	10
Gjiriti, Dervish	10
Glawdzin, N.	28
Gleissner, G.	37
Glozman, O. S.	22
Glushkov, V.	3
Glushkov, V. M.	34
Gluszcz, A.	27
Gode, H.	40
Gol'danskiy, V. I.	29
Golichenkov, V. A.	23
Golikov, V. I.	33
Golubentsev, O. M.	35
Gombodoo, S.	15
Gopasyuk, S. I.	33
Gopko, V. F.	4
Gorbachev, I. M.	38
Gorenbeyn, A. Ye.	4

Gorkunenko, G. N.	38
Gorl, E.	37
Gorodinskiy, S. M.	21
Gorokhovskaya, N. N.	33
Goroza, Z. I.	35
Gorski, C.	27
Goryunov, I. I.	38
Goubeau, J.	31
Grabin, V. F.	38
Grakov, V.	34
Grandori, G.	37
Grebenyuk, R. V.	22
Grevisse, F.	12
Grobelny, Idalia	31
Grt	10
Gruich, D. D.	39
Gruici, C.	8
Gryaznov, A.	2
Guebeli, O.	30, 31
Gulyayev, B. B.	38
Gundobin, N.	2
Gusakov, P. V.	22
Guseynov, D. M.	18
Gynninen, E. M.	35

- H -

Hack, G.	37
Haissinsky, M.	45
Hajek, Jiri	12
Han, Che-yi	16
Han, Tae-yong	14
Haneke, M.	36
Harmel, Claude	11
Harsanyi, Ivan	9
Haufe, W.	36
Hausman-Petrusewicz, I.	27
Hauwaert, Arnold	11
Havlicek, Frantisek	9
Heise	6
Henrych, J.	45
Henschel, J.	26
Herdea, Vasile	20
Hermansson, C. H.	11
Hermoch, V.	34
Herold, Rudolf	9
Hilf, A.	46
Hiltscher, R.	36
Hliniak, A.	27
Ho, Chien-chang	13
Ho, Lich	15
Ho, Truc	17
Ho, Tso-hsiu	16
Ho, Van Nghia	15
Hoai, Vietn	17

Hoang, Ngoc Di	17
Hoang, Van Thai	16
Hochauz, Elzbieta	31
Hoefert, Manfred	46
Hofmann, F.	42
Hoigne, J.	31
Holmberg, Nils	11
Holzell, Fritz	33
Hong, Chuong	16
Horstmann, D.	37
Horvath, Tiberiu	8
Hsi, Hui-ta	20
Hsiang, Kan-ch'eng	14
Hsiao, Kuang-yen	17, 30
Hsu, Kang	14
Hsu, Kung-min	14
Hsu, Tseng-chi	38
Hsu, Tsung-hsiu	16
Hsu, Yao-chun	13
Hubner, E.	36
Hyon, Tong-kwan	17

- I -

Iacobovici, C.	8
Ibragimov, F. I.	21
Ibragimova, V. S.	21
Ignatov, K.	10
Il'in, V. G.	23
Illukowicz, Wilhelm	31
Ingrao, Pietro	11
Ioffe, A. Z.	23
Ionescu, C.	8
Isachenko, T. I.	20
Isayeva, V. V.	22
Iskum, M.	26
Ito, M.	40
Iutsis, A. P.	41, 44
Ivakhnenko, A. G.	47
Ivanov, V. A.	1
Ivanov, V. E.	40
Ivanova, L. G.	24
Ivashchenko, M. I.	44
Iwankiewicz, S.	27
Izhevskiy, G. K.	21

- J -

Jaenicke, Rainer	25
James, H.	45
Jen, Hsi-ch'ou	20
Jouannoud, C.	30
Jovanovic, Aleksandar	8
Jove, J.	45
Juranek, G.	40

- K -

Kabatov, N.	1
Kabrt, Antonin	9
Kachayev, V. L.	24
Kaderschafka, Gisela	9
Kalabukhov, F.	1
Kallai, Gyula	9
Kalman, Cheh	33
Kaltenbach, H.	31
Kamainda, Thomas	13
Kamemoto, Y.	46
Kang, Il-kon	15
Kang, Song-mo	15
Karpman, V. L.	20
Karpov, M. I.	46
Karpov, P. P.	1
Karyan, A. A.	19
Kasabo, Toshiyuki	31
Kasatkin, L. V.	35
Kasatkina, A. P.	22
Kasparova, S. N.	32
Kavetskis, V. I.	44
Kazachkovskiy, O. D.	43
Kazancheyev, Ye. N.	3
Keck, Alfred	7
Keil, E.	43
Keldysh, M. V.	47
Kerkovits, Gyula	26
Kern, R.	37
Kesayev, I. G.	34
Khachatryan, A. B.	23
Kheyfets, L. B.	21
Khodakov, A. L.	39
Khristov, Petur	6

Khrundzhe, V. M.	38	Kotov, K. I.	2
Khusainova, S.	3	Kovalenko, V. Ya.	21
Kiba, Simon	13	Kovpik, O. F.	45
Kibalenko, T.	27	Kozhin, N. I.	3
Kibartas, V. V.	44	Kozlov, M. P.	24
Kielich, S.	46	Kozlov, N.	1
Kielisz, L.	26	Kozlov, O.	3
Kienle, P.	46	Kozyrev, N. A.	32
Kim, Ch'ol-yong	15	Kramar, Jaroslav	36
Kim, Chong-il	17	Krasovskiy, N. N.	34
Kim, Ch'un-chom	15	Kraus, Th.	40
Kim, Kyun-hong	14	Krauze, S.	28
Kim, Song-ki	17	Krawczyk, W.	27
Kim, Ul-chon	17	Krein, S. G.	43
Kim, Yang-son	16	Kreshchanovskiy, N. S.	38
Kind, A.	43	Kreulitsch, H.	37
Kirillin, V. A.	44	Kreymer, A. Ya.	23
Kiriyama, Shigeru	31	Kriegel, E.	40
Kirsanov, V. N.	39	Kroll, H.	42
Kiss, Csaba	16	Kropaczek, Z.	27
Kitlinska, Henryka	9	Kropotova, I. I.	23
Kleczenski, A.	27	Kroshkin, M. B.	18
Klein, H.	33	Krotkiewski, A.	28
Klein, V.	4	Krugler, Herbert	7
Kleinschmidt, A. K.	25	Kruta	25
Klimasenko, L. S.	2	Krutikov, K.	3
Klimov, A. P.	5	Krzywicki, J.	26
Klimov, D. M.	44	Kucheruk, V. V.	24
Klumov, S. K.	23	Kuchkin, S.	3
Kocari, Qimo	6	Kudelina, R. I.	24
Kocherezhkin, V. G.	22	Kudrin, S. A.	21
Kochetkov, L. A.	42	Kudrova, E.	4
Koehler, H.	6	Kuhn, U.	7
Kogan, L. A.	42	Kuhnen, Gustav	46
Kohler, K.	37	Kukkonen, E. Ya.	38
Koj, A.	28	Kuklin, A. I.	21
Koldunov, S. A.	45	Kuksa, I. N.	22
Koleka, Spiro	6	Kulagin, S. M.	24
Koltunov, M. A.	39	Kulayev, V. M.	38
Kondrashev, D. D.	1	Kulbokov, Sava	6
Kondrat'yev, K. Ya.	32	Kulikov, Ya. P.	2
Konopatkin, A. A.	23	Kulikova, I.	5
Konovarov, V. S.	39	Kulikovskiy, L.	47
Kopeliovich, Z.	2	Kunel'skiy, L.	4
Kopinski, Jerzy	47	Kung, Chung-yuan	30
Korolev, L. I.	19	Kung, V.	22
Korolev, M.	47	Kuo, Ch'ang-lin	30
Korolev, V. M.	38	Kuo, Chu-k'un	30
Koryakin, Yu. I.	42	Kurbatov, B. L.	34
Kosov, V.	2	Kurbatskiy, N. P.	47
Kossowski, S.	27	Kurdin, V.	3
Kostenetskiy, K. P.	2	Kurdyumov, P. I.	2
Kosterin, S.	4	Kutasov, V. A.	34
Kosters, F.	40	Kutateladze, S. S.	36
Kostkuba, J.	39	Kutsevalov, V. M.	35

Kuznetsov, N. M.	45
Kuznetsov, V. M.	45
Kuznetsov, V. N.	42
Kvasha, Ya.	47
Kvitnitskiy, M. Ye.	29
Kwiatkowska, M.	27

- L -

Labbe, R.	11
Labrecque, Ed.	13
Lagutkin, V.	1
Lamarck, J. B.	33
Lamberg, Robert F.	7
Lamy, P.	30
Lang, D.	25
Lange, Oskar	8
Langer, Horst	7
Langer, J.	27
Lanin, A. N.	22
Laskowski, Tadeusz	40
Laykhtman, D. L.	43
Lazareva, Ye. N.	21
Lazutkin, E.	4
Le, Binh	16
Le, Cong Thuong	15
Le, Hoang	15
Le, Huu Chinh	15
Le, Quang Dao	16
Le, Thanh Nghi	16
Lebedev, N. V.	22
Lebedev, Ye. A.	38
Lechowicz, Wlodzimierz	8
Leger, M. T.	36
Legeza, M. I.	23
Lein, V.	4
Leont'yev, A. I.	24, 36
Leont'yev, B.	5
Leski, Kazimierz	47
Leskov, L. V.	29
Levan, A.	29
Levin, B. S.	26
Levitskiy, N. P.	36
Lewicki, S.	20
Leypunskiy, A. I.	43
Leytes, F. L.	22
Li, Chia-chih	30
Li, Chin-chao	25
Liang, Gokuo-lin	29
Liang, Wen-ben	13
Liebermann, Lucy	26
Liebig, Walter	7
Likhoradov, A. P.	2
Linazasoro, J. M.	29

Lindberg, G. U.	23
Lindemann, P.	37
Lipnik, A. A.	44
Lipowski, Leopold	37
Lippman, Hans J.	35
Lipskiy, Yu. N.	32
Litvin, M. Z.	43
Litvinov, M. A.	23
Litynski, Marian	20
Liu, Ch'un	15
Liu, Ch'un-yang	30
Liu, Lien-sheng	30
Liu, Nan-lei	15
Liu, Tsun-hai	16
Liu, Ying-chun	39
Livshits, R. S.	1
Lo, Chieh-yao	30
Locatelli, P.	37
Lochak, G.	43
Lodoisuren, B.	15
Logginov, B. I.	18
Loginov, Ye. F.	2
Lomov, B. F.	43
Loninotti, L.	31
Lonjid, N.	33
Lotheissen, George	26
Lu, Feng	16
Lu, Tun	16
Lukic, Vojin	10
Lukosz, W.	46
Lur'ye, A. I.	44
Lvov	4
Lyaudis, B. V.	39
Lyot, B.	34
Lyschik, J.	6
Lysenko, I.	4

- M -

Ma, Ta-yu	47
Maas, H.	36
Maass, M.	7
Machu, W.	36
Magnitskiy, O. N.	37
Mahr, Hermann	35
Makrovich, A. Z.	1
Malanina, V. N.	21
Malik, A.	28
Malinovskiy, R. Ya.	5
Malinowski, Z.	27
Malishev, G. M.	43
Mal'kov, V. G.	3
Malyshev, G.	1
Mamak, Wiktor	33
Mankowski, Z.	27
Marchant, Y.	30
Marchuk, G. I.	42
Mardzhanyan, G. M.	19
Mariano, M. H.	45
Marinescu, Teodor	9
Markov, A.	41
Markov, A. A.	41
Marshak, I. S.	45
Martinez, A. Alvrez	28
Martini, Z.	20
Martins de Carvalho, H.	12
Marton, Lovas	7
Martsinkovskaya, R. H.	1
Marx, F.	7
Mash, V. A.	41
Masterov, N.	2
Mattei, M. J.	34
Matveyev, V.	16
Maystrakh, Ye. V.	20
Mazurov, V. I.	23
Medovar, B. I.	37
Mei, Shih-jung	30
Mercier, P.	25
Mergol'd, D. P.	24
Meyerson, F. Z.	20
Meysson, N.	36
Michard, J.	40
Michel, Jean	12
Mieloch, Roman	8
Mikhailovskaya, L. V.	45
Mikhailovskiy, A. B.	45
Mikhaylov, A. I.	47
Mikhaylov, F. A.	44
Mikhaylov, G. A.	41
Mikhaylov, P.	3

Mikhaylova, V.	39
Mikheyev, A. S.	44
Mikota, Kazuhiko	31
Milanovic, Petar	8
Milisme, Pierre	34
Minenko, V. I.	29
Mineyev, F. I.	45
Mineyev, V. G.	19
Ming, Nai-pen	39
Mirkov, Kornelije	9
Mitayshvili, A. A.	1
Mittel'shtedt, A. A.	23
Mityayev, Yu. I.	42
Miwa, Katsutoshi	26
Miyakawa, O.	37
Mkhitaryan, A. M.	35
Mnatsakanyan, A. G.	24
Mo, Shao-kiuei	42
Mobius, Heinz	46
Molchanov, V. A.	43
Mondalski, Janusz	8
Morawski, Franciszek	28
Morozov, Yu. V.	21
Motornaya, V. P.	24
Muhri, Franz	11
Mulcaster, K.	35
Muller, D.	7
Muller, K.	37
Mun, Pyong-ham	14
Munzel, H.	42
Muravov, I. V.	29
Murgescu, Costin	8
Musierowicz, A.	20
Musierowicz, Arkadiusz	33
Mutafchiyev, B.	42
Mutsenek, K. Ya.	35
Mutseniyeks, V. A.	41

- N -

Nakae, T.	31
Nakanishi, T.	31
Nakhmanovich, A. L.	19
Nametkin, N. S.	31
Naumenko, P.	2
Naumov, Eduard	47
Nazarchuk, M. M.	43
Nazarenko, V. R.	38
Nechval', I. T.	23
Nekrasov, N.	4
Nelovkin, P. D.	3
Neyfakh, A. A.	21
Ngoc, Hung	15
Nguyen, Chuong	15
Nguyen, Ninh	16

Nguyen, Thuong Hoa	15
Nguyen, Van Ngan	15
Nhuyen, Duy Trinh	16
Nicks, R.	43
Nicolet, Marcel	33
Niebroj-Dobosz, I.	27
Nikitina, M. F.	38
Nikolayev, A.	22
Niylik, Kh. Yu.	32
Nolle, E. L.	44
Notkin, A.	1
Novak, V.	34
Novikov, G. I.	29
Novikov, V. D.	35
Novikova, A. P.	38

- O -

Obolenski, Mikolaj	18
Obrosoy, A. N.	22
Octavian, P.	33
Odrzywolska, A.	27
Oelander, A.	40
Oganyan, A.	1
Ogir', M. B.	33
Oleszkiewicz, L.	28
Olsuf'yev, N. G.	24
Olszewski, W. L.	28
Oranskiy, I. Ye.	22
Orlov, Ya.	5
Orlowski, W. J.	27
Osetowska, E.	28
Osipov, S. I.	45
Osipov, Yu. S.	34
Ostapenko, V. N.	41
Ostrowska, A.	26, 27
Ota, Zenjiro	14
Otorbayev, K.	3
Otto, G.	6
Ovsepyan, S. G.	43
Ovseyevich, I. A.	34
Ovsyannikov, N. G.	47
Owsinski, J.	26

- P -

Pablo, M.	12
Pachlewski, Roman	28
Pagony, Hubert	7
Pak, Ki-son	17
Pak, P'ung-sik	15
Pakhomov, V. G.	4
Pampuch, R.	40
Pangarov, N.	39
Panin, V. V.	38

Panitskiy, V.	22
Pannert, L.	27
Pan'shina, T. N.	19
Papai, Bela	7
Papajorgji, Harilla	6
Parfenova, E. I.	39
Parin, V. V.	20, 22
Park, Byong-muk	17
Parkhomenko, G. M.	21
Parmentier, P.	36
Pascanu, Vasile	8
Paschedag, H.	40
Passler, H.	7
Pastukhov, N.	5
Pastuska, G.	30
Paton, B. Ye.	37
Pauli, W.	46
Pavaloiu, I.	37
Pawelski, O.	37
Pawlikowski, M.	27
Pedsakovic, Milentije	8
Pejovski, V.	9
Pelzer, N.	42
Penev, Petko	6
Perekatov, V. I.	41
Perets, M. I.	35
Persic, Nikola	28
Pertsev, M. A.	4
Peter, Otto	46
Petrov, S. N.	29
Pfleiderer, Gerhard	25
Phan, Trong Tue	15
Piechotkova, Maria	7
Pierozynski, Marian	7
Pierzchalski, Tadeusz	20
Pilipenko, A. T.	29, 37
Piotrowski, M.	26
Piotrowski, Z.	28
Piper, Albrecht	25
Pittel', B. G.	41
Pletnev, S.	47
Pocchiari, F.	31
Pokrovskiy, G. I.	42
Polikarpov, G. G.	22
Polis, Z.	27
Polisadov, V. N.	38
Polishchuk, I.	3
Politze, W.	6
Polozhiy, G. N.	42
Polulyakh, P. A.	22
Polyachenok, O. G.	29
Polyakov, A. Yu.	38
Ponomareva, A. T.	19
Ponomareva, R. B.	29
Pooka, P.	39

Popov, A. A.	38
Popov, N. N.	18
Popov, P. V.	19
Popov, V. P.	4
Popovic, Svetolik	9
Porai-Koshits, E. A.	37
Pozdnyakov, B. V.	42
Pradel, J.	42
Prazyan, I.	5
Presnyakov, L. B.	1
Priemer, H.	6
Prigge, W.	37
Prisyazhnuk, A. A.	19
Probulski, Zdzislaw	40
Prokop, Gert	10
Prokop, Jan	7
Prokopchuk, A. Ya.	25
Promin, M. Ye.	19
Pronenko, V. I.	35
Pronin, M. Ye.	19
Pshenichnyy, B. N.	41
Pugachev, B. P.	41
Pugachev, Ya. I.	44
Pulpitel, M.	39

- Q -

Querc, Y.	40
-----------	----

- R -

Rabinovich, B. I.	44
Rachev, Aleksandur	6
Racz, Albert	7
Radivojevic, Predrag	8
Ragalyavichyus, Yu.	1
Rakhimbayeva, N.	39
Rakitin, V. V.	41
Raknic, Franjo	6
Ramohito, Halin	9
Rapoport, G. N.	35
Rastrigin, L. A.	35, 41
Ravdonikas, O. V.	24
Razumov, N. A.	4
Redinha, Jose	13
Redon, A.	30
Regnaut, P.	30
Reimann, Zbigniew	28
Rellermeyer, H.	40
Reshetnyak, Yu. G.	41
Ribas, Oscar	13
Richarte, J. M.	13
Rico	13
Riedel, R. O.	36
Rist, A.	36, 40

Rodionova, V. I.	39
Rog, V. G.	5
Rognon, J.	45
Roktanen, L. S.	19
Rolandi, G.	30
Rolland, Pierre	11
Romann, Paul	45
Romanova, M. A.	43
Romer, T.	27
Roncero, A. Vazquez	32
Rosenkranz, W.	40
Roslavtseva, S. A.	19
Rosnowski, A.	27
Rossi, G. F.	26
Rovenskiy, I. I.	39
Roy, R.	13
Rozanova, N. S.	21
Rozenberg, L. A.	22
Rozhdestvenskiy, I. G.	19
Rozynek, M.	27
Rublevskiy, I. N.	38
Rubtsov, V. K.	42
Rudnyy, N. M.	43
Rudolph, H.	34
Rudy, E.	46
Ruf, H.	42
Rukhadze, E. G.	29
Rumph, H.	30
Rusev, Petko	9
Ruszkowska, B.	20
Rusznay, Istvan	47
Rutkovskiy, G. Ya.	2

- S -

Saga, T.	37
Salvetti, O.	42
Samarin, G.	22
Samarin, V. G.	18
Samgin, P. A.	19
Samiadi	16
Samostrellov, P. V.	2
Samsonov, G. V.	29
Samsonovich, L. G.	24
Samsonovym, G. V.	37
Sanielevici, Al.	46
Sarishvili, I. G.	19
Savel'yeva, R. A.	24
Schaaber, O.	37
Schaefer, H.	31
Schillaci, Giuseppe	26
Schilling, W.	40
Schmidt, W.	36
Schoen, Dieter	6
Schutz, A.	37

Schwaab, P.	35	Smileski, Kuzman	5
Schwabe, G.	40	Smirnov, A. S.	30
Schwarz, W.	40	Smirnov, K. S.	23
Schwarzbach, Martin	33	Smirnov, V. N.	23
Scinar, R.	36	Smolak, K.	27
Scrocco, E.	42	Sobd, G.	17
Sebardt, C.	37	Sochava, V. B.	20
Sedykh, A. S.	19	Sokolova, V. I.	19
Seeliger, H.P.R.	26	Sokolovskiy, L.	2
Sellyei, M.	46	Sokolowski, Jan	26
Semenkevich, S.	4	Soldatov, G. M.	24
Semenov, N. N.	29	Solti, F.	26
Semenov, V. N.	19	Somov, G. P.	24
Senik, P. M.	44	Sonntag, D.	33
Sera, C.	31	Sonntag, Rudolf	37
Sergeyeva, T. I.	24	Sonokama, Konomo	37
Sergiyenko, I. V.	39	Soshka, V.	43
Serzysko, W.	28	Sosnovskiy, A. T.	25
Severdenko, V. P.	39	Sovernyy, A. B.	32
Severnnyy, A. B.	32	Spany, Viktor	34
Shakhnazarov, G. Kh.	5	Spitzer, Gerard	11
Shalimanov, Stoyan	6	Stahl, E.	31
Shatalova, M. I.	19	Stahl, Egon	31, 46
Shaub, Yu. B.	32	Stammbach, K.	30
Shchedrin, N. I.	41	Staniszewski, R.	37
Shefer, V. F.	23	Stec, E.	28
Shen, Chih-ch'uan	30	Stefanescu, St.	8
Shevenko, S. M.	41	Stein, J.	26
Shidlovskiy, A. A.	35	Steinmetz, W.	35
Shih, Tung-hsiang	13	Stempniewski, S.	6
Shin, P. V.	19	Stepanov, V. M.	38
Shishchenko, S. V.	19	Sterkin, I.	4
Shishkova, Ye. V.	22	Stoeri, M.	31
Shiskov, I. V.	39	Stoyanova, M. N.	32
Shmakov, V. P.	44	Strak, Witold	8
Shmidt, V. M.	22	Strobl, Franz	9
Shnirman, G. L.	44	Strutt, M.J.O.	35
Sholokhovitch, M. L.	39	Stryjewski, Franciszek	20
Shono, Tsuneki	14	Stumilin, S.	5
Shtoda, A. V.	35	Suchkov, Yu. G.	24
Shuster, A.	4	Sugimoto, Masakatsu	46
Shustov, B. S.	33	Sushchuk-Slyusarenko,	
Shvidler, M. I.	35	I. I.	38
Siegmann, H. C.	46	Sydow, A.	34
Silbiger, Stevan	8	Sykut, A.	26
Silich, V. A.	24	Sysoyev, N. N.	32
Silyayeva, M. F.	25	Sytyi, M.	42
Sirotkin, Z.	1	Szczygiel, K.	27
Skladnev, F.	2	Szwarc, B.	27
Skovoroda, K. M.	1	Szyfelbejn, S.	28
Skrjabin, K. I.	21	Szymanik, R.	37
Skulmowski, J.	26		
Skurikhina, L. A.	22		
Slonim, Yu. M.	33		
Smialowski, Michal	7		

- T -

Takahashi, Y.	46
Tal', A. A.	34
T'ang, Huan-i	17
T'ang, Yu-ch'i	45
Tarasov, S. T.	3
Tareyko, N. A.	3
Tarnetskiy, B. B.	38
Tatebayashi, K.	40
Tawner, F.	7
Ter-Agonesian, A. H.	2
Terent'yev, A. P.	29
Terent'yev, M.	19
Tereshchenko, N. A.	3
Testa, S.	26
Thum, A.	36, 37
Tikhaya, M. G.	38
Tikhomirova, N. S.	39
Tikhov, T. S.	22
Ting, Hsiao-shih	33
Tkachov, F. T.	29
Tokunaga, Y.	40
Tomilov, V. P.	19
Torbicka, E.	27
Torin, V. S.	18
Tosatti, Egidio	26
Toshev, Vasil	6
Toth, Ferenc	33
Traistaru, I.	8
Tran, Duc	20
Tran, Than Dat	17
Trendelburg, Rigo	7
Trendota, Jozef	8
Trenkler, H.	36
Treszczanowicz, E.	41
Tricot, R.	25
Trifonov, S.	4
Trinks, H.	30
Trofimov, B.	18
Troitskiy, V. S.	44
Tromel, G.	37
Trusova, A. D.	19
Tschernyschewa, T. I.	31
Tsifrinovich, I. I.	44
Tsiolkovskiy, K. E.	18
Tsuneki	14
Tu, Lei	16
Tudor, C.	33
Tumanov, Yu. A.	36
Turchin, F. V.	19
Tushinsky, L. I.	39
Tutino, Saverio	11
Tyshchenko, V. P.	22

- U -

Ugarov, A.	22
Uhlemann, Ingrid	6
Ul'yanov, P. L.	41
Ushakov, G. N.	42
Utkin, E.	12
Uzemblo, V. V.	32

- V -

Vanbreughseghem, R.	25
Van Caeneghem, J.	30
Vanek, Norbert	34
Van Geluwe, H.	13
Van Krevelen, D. W.	30
Varivonchik, V.	4
Vartanian, A. T.	29
Vasilescu, V.	31
Vasil'yeva, N. N.	21
Vasquez, Ramon	10
Vavilov, V. S.	44
Vayssiere, P.	40
Vekker, L. M.	47
Veksler, V. I.	39
Velikovich, L. N.	18
Vel'mina, N. A.	32
Vereshchagin, L. A.	43
Vergnou, A. H.	45
Vernov, S. N.	43
Verte, L. A.	39
Vessereau, A.	25
Vilesov, F. I.	34
Vinogradov, G. V.	29
Vitinskiy, Yu. I.	32
Vizun, Yu. I.	41
Vladimirov, N. P.	32
Vladimirskiy, B. M.	32
Vol'mir, A. S.	43
Volobuyev, V. I.	3
Vologdin, S.	3
Von Schulte, A.	36
Vormum, G.	31
Vorob'yev, A. F.	29
Vorontsov, E. S.	39
Voytekhova, V. A.	19
Vsevolodov, E. B.	23
Vukovic, Ivan	8
Vukovic, Milorad	8
Vysotskiy, A.	47

- W -

Waldheim, E.	7
Walther, Helmuth	46

Wang, An-ch'iu	17
Wang, Ch'ih-wei	14
Wang, Chi-yeh	13
Wang, K'o	14
Wang, Shou-su	34
Wang, Te-fu	33
Wang, T'ien-chuan	45
Wang, Wei-p'ing	16
Wartmann, R.	36
Waslak, B.	27
Wawrzynczak, Stefan	8
Wawrykowicz, T.	27
Weckermann, B.	46
Wehner, Guenther	40
Werner, E.	20
Wertheim, M. G.	45
Widner, H.	31
Wierzchowski, Z.	20, 26, 31
Winkler, O.	40
Wojahn, H.	30
Wojtowicz, S.	27
Woog, Edgar	11
Wu, Ying-t'ang	17
Wuckel, H.	30
Wukusick, C. S.	37
Wung, Pei-kun	30

- X -

Xuan, Thinh	17
-------------	----

- Y -

Yakhno, V.	2
Yakovlev, M. N.	45
Yakovlev, Yu. P.	38
Yakubaytis, E. A.	47
Yang, Fu-yu	25
Yang, Ming-hsien	13
Yanishevskiy, F. V.	23
Yarilova, E. A.	39
Yaroshevskiy, M. G.	47
Yatskevichyus, A. S.	23
Yazovskikh, I. M.	38
Yefimov, A.	3
Yeh, Mei-chen	30
Yelistratov, M. R.	34
Yelizarov, Yu. A.	22
Yen, Hsun-ch'u	25
Yen, Tung-sheng	30
Yerlykhin, I. I.	4
Yi, Hyo-hyok	14
Yi, Pyong-sok	14
Yi, Yang-sun	17
Yi, Yong-tok	14

Ying-mei, Hu	16
Yovkov, Yovko	6
Yu, Lin	13
Yu, Shu-lin	14
Yuan, Shu-lan	16
Yuang, Ch'eng-yeg	30
Yueh, Kuang-chao	14
Yun, Pyon-song	17
Yung, Tour	36
Yunger, S. V.	38
Yurkova, L. A.	32
Yutsis, A. P.	44

- Z -

Zadul'skaya, E. S.	23
Zaidel', A. N.	43
Zaidol, R. M.	45
Zaks, L. M.	39
Zaporozhchenko, A. Ya.	24
Zavtsov, V. P.	3
Zavtsova, K. K.	21
Zel'vowski, Adam	8
Zel'ner, E.	43
Zel'dovich, Ya. B.	45
Zenjico	14
Zernov, K. I.	39
Zgliczynski, S.	38
Zhdanovich, G. V.	4
Zhembus, M. D.	2
Zherebtsov, L. D.	21
Zileikin, Ya. H.	44
Zhakov, V.	1
Ziem, Jochen	10
Zimakov, P. V.	38
Zimin, V.	2
Zintl, E.	41
Zitter, H.	40
Zosimovskaya, T. V.	19
Zubov, I.	2

* * *

UNCLASSIFIED
Central Intelligence Agency



Washington, D.C. 20505

7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in dark ink, appearing to read "Sergio N. Alcivar".

Sergio N. Alcivar
Chief, CIA Declassification Center,
Declassification Review and Referral
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

UNCLASSIFIED



Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed
by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0834364	78-03109A	52	1	6	62	Consolidated Translation Survey For February 1963	2/1/1963	232	Approved For Release	3/25/2004
AD0402915	78-03109A	52	1	7	63	Consolidated Translation Survey For March 1963	3/1/1963	314	Approved For Release	3/25/2004
AD0405169	78-03109A	52	1	8	64	Consolidated Translation Survey For April 1963	4/1/1963	278	Approved For Release	3/25/2004
AD0409473	78-03109A	52	1	9	65	Consolidated Translation Survey For May 1963	5/1/1963	358	Approved For Release	3/25/2004
AD0413153	78-03109A	53	1	1	66	Consolidated Translation Survey For June 1963	6/1/1963	361	Approved For Release	3/25/2004
AD0414818	78-03109A	53	1	2	67	Consolidated Translation Survey For July 1963	7/1/1963	249	Approved For Release	3/25/2004
AD0418328	78-03109A	53	1	3	68	Consolidated Translation Survey For August 1963	8/1/1963	324	Approved For Release	3/25/2004
AD0834365	78-03109A	53	1	4	69	Consolidated Translation Survey For September 1963	9/1/1963	193	Approved For Release	3/25/2004
AD0423936	78-03109A	53	1	5	70	Consolidated Translation Survey For October 1963	10/1/1963	232	Approved For Release	3/25/2004
AD0426736	78-03109A	53	1	6	71	Consolidated Translation Survey For November 1963	11/1/1963	298	Approved For Release	3/25/2004
AD0428566	78-03109A	53	1	7	72	Consolidated Translation Survey For December 1963	12/1/1963	298	Approved For Release	3/25/2004
AD0431011	78-03109A	53	1	8	73	Consolidated Translation Survey For January 1964	1/1/1964	273	Approved For Release	3/25/2004
AD0433215	78-03109A	53	1	9	74	Consolidated Translation Survey For February 1964	2/1/1964	200	Approved For Release	3/25/2004
AD0437984	78-03109A	54	1	1	75	Consolidated Translation Survey For March 1964	3/1/1964	305	Approved For Release	3/25/2004
AD0440831	78-03109A	54	1	2	76	Consolidated Translation Survey For April 1964	4/1/1964	155	Approved For Release	3/25/2004
AD0442174	78-03109A	54	1	3	77	Consolidated Translation Survey For May 1964	5/1/1964	249	Approved For Release	3/25/2004
AD0443106	78-03109A	54	1	4	78	Consolidated Translation Survey For June 1964	6/1/1964	191	Approved For Release	3/25/2004
AD0444756	78-03109A	54	1	5	79	Consolidated Translation Survey For July 1964	7/1/1964	169	Approved For Release	3/25/2004
AD0447557	78-03109A	54	1	6	80	Consolidated Translation Survey For August 1964	8/1/1964	153	Approved For Release	3/25/2004
AD0450482	78-03109A	54	1	7	81	Consolidated Translation Survey For September 1964	9/1/1964	141	Approved For Release	3/25/2004
AD0451428	78-03109A	54	1	8	82	Consolidated Translation Survey For October 1964	10/1/1964	149	Approved For Release	3/25/2004
AD0453181	78-03109A	54	1	9	83	Consolidated Translation Survey For November 1964	11/1/1964	157	Approved For Release	3/25/2004
AD0455133	78-03109A	54	1	10	84	Consolidated Translation Survey For December 1964	12/1/1964	121	Approved For Release	3/25/2004
AD0456859	78-03109A	54	1	11	85	Consolidated Translation Survey For January 1965	1/1/1965	179	Approved For Release	3/25/2004
AD0458780	78-03109A	54	1	12	86	Consolidated Translation Survey For February 1965	2/1/1965	161	Approved For Release	3/25/2004
AD0461501	78-03109A	55	1	1	87	Consolidated Translation Survey For March 1965	3/1/1965	301	Approved For Release	3/25/2004